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Volume 167 No. 20

Oil, Paint and Drug Reporter

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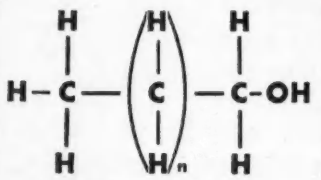

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Loss Leader Controls Are Seen Unworkable

Laws to curb loss leader selling as a substitute for the fair trade laws would be found to be "tragically unworkable" and serve only those big merchants and marketing interests that have been endeavoring for years to destroy fair trade, John W. Anderson, president of the American Fair Trade Council, declared last week.

The Department of Justice, at the direction of Attorney General Herbert Brownell, is now making a study of the possibilities of substituting loss-leader control legislation for the present Miller-Tydings and McGuire acts. This was disclosed at hearings earlier this month (OPD, 5/9/55) by assistant Attorney General Stanley Barnes before the senate judiciary committee. Repeal of the fair trade laws has been recommended by the Attorney General's National Committee for Study of the Antitrust Laws.

"Remote From Reality"

In a statement commenting on the department's study, Mr. Anderson said that it "reflects an unfortunate remoteness of the concepts of Mr. Barnes and of most of his committee members from the realities of the market place." He said that the council had made such a study long ago and found that the practical problems to be encountered in setting a minimum pricing standard for any product would defeat the entire project.

The reseller's operating costs would have to be determined by extensive audit before the point at which loss began could be established, he pointed out, and no two accountants would be likely to agree on that figure, even when given the same reseller and the same set of conditions.

"Such audits would have to be made as to each individual product on which the price was cut or to be cut. Operating costs of individual dealers, even in the same block, vary substantially," Mr. Anderson pointed out.

"There wouldn't be enough professional accountants in the entire United States to supply the demand for accounting services in a single state under such a law, if

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Columbium Buying Halted By GSA With Goal Reached

Government purchases of columbium and tantalum under the long-range program for strategic and critical materials were halted last week, it was announced by the General Services Administration. The goals of the program have just about been reached, according to a GSA official. GSA announced last month that deliveries then stood at more than 9,000,000 pounds. When the program was begun in 1952, it had a goal of 15,000,000 pounds of contained combined columbium-tantalum pentoxide, GSA stated.

Titanium Sponge Project Set Up by Mines Bureau

The Bureau of Mines has entered into a cooperative agreement with Wah Chang Corporation, New York, to conduct research and development work on an improved process for the production of titanium sponge metal. The work will be done at the bureau's experiment station at Boulder City, Nev., where part of the titanium pilot plant will be reactivated for the duration of the project.

The primary objective is to conduct pilot plant tests and further improve a process for making high-quality titanium sponge metal that the corporation has developed on a small-scale in its laboratories at Glen Cove, N. Y. Wah Chang will bear the major part of the expense of the project, and will detail technical representatives to work with bureau engineers and metallurgists. The bureau will publish the results of the tests, and any improved processes developed during the cooperative project will be made available to the industry.

Fertilizer Supply Estimates Revised Downward by USDA

Estimates of fertilizer supplies for the current season have been revised downward by the Department of Agriculture to 6,253,000 tons of contained material from the September 1954 forecast of 6,520,520,000 tons, according to a supplemental report issued last week by A. L. Mehring and C. A. Graham of the department's fertilizer staff.

The new estimate placed total supplies of nitrogen for fertilizer use at 2,126,000 tons which includes 1,807,000 tons of domestic production; phosphorus at 2,286,000 tons which includes 2,214,000 tons of domestic production; and potash at 1,841,000 tons including 1,722,000 tons of domestic production.

The report noted that deliveries this year have again been slow and indicates a return to the pre-World War II pattern when more than half of the total fertilizer consumption moved to the farm during the brief period from March 15 to May 15. The trend in usage, however, is still toward more concentrated material and mixtures containing higher percentages of nitrogen and potassium and less calcium and sulfur. Thus as much nitrogen and potash may be moved this season as in last season in spite of the smaller tonnage of fertilizer.

Distribution facilities may be strained to handle the volume of fertilizer demand, the report said, but there will be no lack of adequate production facilities.

Transport Policies Bill Introduced; Extensive Hearings Are Anticipated

A bill to carry out the recommendations of the Presidential Advisory Committee on Transport Policies and Organizations for a complete revision of the government's approach to the transportation problem was introduced in the senate last week. The bill, S. 1920, was sponsored by Sen. George A. Smathers of Florida, Sen. Warren G. Magnuson of Washington, and Sen. John W. Bricker of Ohio.

The amendments to existing transportation laws recommended by the committee and embodied in the bill are highly controversial and will be subjected to extensive hearings by the congressional committees before any attempt is made to enact them into law. This statement, from the sponsoring senators would, make it doubtful that many of the recommendations will be enacted this session.

To carry out the proposed new policy of reducing economic regulation to a minimum while placing increased reliance on competitive forces in rate making, the bill would:—

• Use competititve forces in rate making by (a) limiting the ICC rate power to the setting of minimum and maximum rates, but the minimum would not be less than compensatory, and the maximum would be at least above the full cost of performing the services; (b) cutting the period the ICC could suspend proposed rates from seven to three months; (c) removing the requirement that carriers obtain prior approval of long and short haul rates, if necessary, to meet competition; and (d) making volume freight rates lawful, if necessary to meet competition.

• Re-define private carriers so that private truck operators would be limited to carrying the owners's products, and the return trip limited to supplies for the owners' use.

• Re-define contract carriers so that such carriers would be required to publish their actual rather than minimum rates.

• Repeal the bulk commodity exemptions applicable to water carriers.

• Tighten standards under which freight forwarder associations operate.

• Empower the ICC to override state bodies on the continuance of service operated at a loss.

• Reduce the exemptions now enjoyed by the government on its rates.

FTC Claims Trade Name Authority; Readies New Case Handling Rules

A change in Federal Trade Commission rules for handling cases, described as "the most comprehensive and useful in the commission's history," will become effective May 21, it has been announced by Edward F. Howrey, chairman of the FTC.

The commission has made public what it calls "a far-reaching revision and streaming" of its rules for handling cases brought before it. The rules of practice have been completely overhauled and modernized.

Aimed to Minimize Delay

"The revised rules govern all formal and informal proceedings, and, through modernization of procedures, they will serve to minimize delay and promote efficiency and fairness," Mr. Howrey said.

"The improved rules and their assembly into a single document," Mr. Howrey continued, "will assist greatly in speeding proceedings before the commission. In addition to the improvements in the rules themselves, we now can offer the legal profession, businessmen and the public a logically arranged text containing a complete description of agency organization, its general procedures, its rulemaking procedures, its adjudicative rules, and the statutes under which it operates."

Chairman Howrey pointed out that in recent years there has been an accumulation of changes and additions to the adjudicative rules which may have resulted in duplication and confusion. This, he said, will now be eliminated.

In its new revision of rules, the commission has attempted wherever possible to follow recommendations recently addressed to federal administrative agencies by the President's conference on administrative procedure. Among the significant recommendations followed was provision for prehearing conferences to simplify, clarify and possibly dispose of many of the issues of a case, so that full attention can be given to the disputed issues and needless protraction of the case avoided.

Consent Order Rule Revised

The consent order rule has been revised to provide that consent order negotiations do not become a part of the record until final commission approval has been obtained. This accords with prevailing legal practice as to negotiations between the parties looking toward voluntary termination of litigated proceedings.

The rule relating to complaints has been

—Continued on page 86

The Federal Trade Commission last week held that it has the authority to qualify the use of registered trade names to prevent deception in sales of the product to the consuming public. The ruling was immediately challenged by Commissioner Lowell B. Mason who accused the commission of "mischievous interpretations."

The issue arose in a complaint under review by the commission involving sewing machines which were sold in this country without adequate identification of the fact that they were of Japanese origin. The machines were sold under the name "Universal" which the complaint said led purchasers to believe the product was produced by a firm identified with other lines of home appliances.

Findings of Commission Majority

In the majority opinion, the commission held that although the trade name had been accepted for registration by the Patent Office and the company had spent considerable money in legal actions to prevent others from use of the word "Universal" on sewing machines, it had the right to qualify the use of the name.

The commission's order directed the company to cease and desist from using the word "Universal" or any simulation thereof, as a brand or trade name to designate its sewing machines unless the company's corporate name was also shown in connection therewith.

Taking issue with the order, Commissioner Mason accused the commission of "wandering" and reversing another agency of the government—the copyright office of the Department of Commerce. He said there is no doubt that the FTC has the authority to order the firm to add its name to the trade name, but see what mischievous interpretations we foster.

"This part of the order is based on the testimony of witnesses, some in Texas, some in Philadelphia, who testified when they saw the word 'Universal,' they thought the sewing machine was manufactured by Landers, Frary & Clark.

Not Sewing Machine Makers

"It so happens that Landers, Frary & Clark do not make sewing machines, but nevertheless it might be asked when we require Standard to add its name to the word 'Universal' every time Standard uses it, are we in effect giving Landers, Frary & Clark an exclusive and perpetual monopoly to use the word 'Universal' by itself?

"Certainly on its face it looks like we were, but careful analysis will show this is not so.

"Tomorrow Landers, Frary & Clark may haplessly find themselves the butt

—Continued on page 86

Patent Office Study Set By Committee of Senate

The senate last week authorized its judiciary committee to conduct a broad study of administration of the Patent Office and the laws relating to patents, trademarks and copyrights. A special fund of $50,000 was appropriated to cover the costs of the project.

The principal aim of the study will be to determine the cause of the increasing delay between the time when an application for a patent is filed and the time when the patent is issued. Latest records of the Patent Office show that there are over 200,000 applications awaiting action and that the average delay exceeds a year.

Most of the delay is attributable to reduced appropriations for the agency, fewer examiners, and to the fact that an increasing number of patent applications relate to complex matters. In years past patents dealt primarily with mechanical subjects, but in recent years there has been a tremendous growth of complex patents, particularly relating to chemicals.

Copper Is Made Available For Industry Next Quarter

Copper being acquired by the government under the defense production act and the stockpiling act will continue to be made available to industry in the third quarter to relieve copper shortages, the Office of Defense Mobilization announced last week. The action taken by ODM authorizes the General Services Administration to release the copper to hardship cases as certified by the Department of Commerce. About 16,000 tons of copper may be distributed under the order.

FTC Settles Price Fixing Case Against Drum Firms

The Federal Trade Commission last week ordered five major steel companies which control 75 percent of the domestic steel drum business to stop conspiring to fix prices of steel drums. Companies named in the commission's order were United States Steel Corporation, Jones & Laughlin Steel Corporation, Inland Steel Company, Rheem Manufacturing Company and Republic Steel Corporation.

The commission said that the firms and their officers consented to entry of an order under the consent settlement procedure. The action represented the commission's approval of a hearing examiner's initial decision accepting the settlement. The complaint had been issued in January, 1953.

The order called for the companies to cease entering into or continuing any

—Continued on page 86

Carbromal Hearing June 7

The Food and Drug Administration will hold a public hearing June 7 at its headquarters building, Washington, D. C., on an application for removal of acetylcarbromal and bromural from its list of habit-forming chemical derivatives of carbromal. At the hearing evidence will be restricted to testimony and exhibits relevant and material to the application.

Oil Compact Measure Awaits House Action

Senate joint resolution 38 to extend the life of the Interstate Oil Compact four more years until August 31, 1959, was passed with an amendment last week by the senate and sent to the house for concurrent action. This is the fifth extension of the compact that was entered into in 1935 to conserve oil and gas reserves.

The amendment, written into the resolution by the senate, was offered by Sen. Paul Douglas of Illinois and directs the Attorney General to watch operations under the pact to see whether the powers granted to the states are being used to prevent monopoly, or quasi-monopoly, or to fix prices.

Sen. Douglas pointed out to the senate that the purpose of the compact, as stated in article V, is not to authorize the states to limit the production of oil or gas for the purpose of stabilizing or fixing the price, create or perpetuate monopoly or promote regimentation, but is limited to the purpose of conserving oil and gas and preventing avoidable waste within reasonable limitations.

Under his amendment, the Attorney General must make an annual report to congress stating whether or not in his opinion "the activities of the states under the provisions of such compact (1) have remained with the purpose of such compact as set out in article V thereof, and (2) have resulted in the stabilizing or fixing of prices of oil or gas, the creation or perpetuation of any monopoly, or the promotion of any regimentation in the production or sale of oil or gas, with the understanding that conservation and the protection of the small producer are the paramount purposes of any rules and regulations issued under the compact."

Mineral Rights Legislation Gains Approval of Senate

Legislation fixing the policy of the government with regard to the taking and expropriation of mineral rights to lands it acquires from the citizens was passed by the senate last week. The bill, S. 748, now goes to the house for passage.

Sen. Russel B. Long of Louisiana explained that the bill provides that the government shall take the mineral rights of citizens only when the government finds it necessary to do so, or when the use to which the government intends to put the land would be impracticable or infeasible if the government did not take the mineral rights.

"In the past," he said, "a considerable number of complaints have been made, in most instances by citizens who, on the basis of good legal advice, have taken the precaution to protect their mineral rights when the government has sought to acquire their land. It is unfortunately true, however, that many persons who have not had legal advice did not resist the taking of their mineral rights, and therefore in many instances, the federal government has unnecessarily deprived them of their mineral rights.

"As a matter of fact, the federal government now owns more than 25 percent of all the land in the United States, and it already has mineral rights to all the submerged lands of the continental shelf. Therefore, in most cases, there is no real need for the federal government to condemn or to expropriate mineral rights of citizens," Sen. Long stated.

Nopco Names Research Head of Vitamin Division

Dr. Melvin Hochberg has been named director of research and production of the vitamin division of Nopco Chemical Company, Harrison, N. J.

In addition to his previous responsibilities as head of the vitamin products laboratory, Dr. Hochberg will now assume responsibility for the direction of the vitamin assay laboratories and the nutrition laboratory. He will also be in charge of all vitamin division production, including nutritional fortifiers for animal and poultry feeds, pharmaceutical products, and vitamin concentrates for milk and dairy products produced for Vitex Laboratories, a subsidiary of Nopco.

Aniline Facility Projected By National Aniline Division

National Aniline Division of Allied Chemical & Dye Corporation, New York, last week announced plans to construct a plant for the manufacture of aniline oil at Moundsville, Mo. The new aniline plant will be a duplicate of the present Moundsville plant which commenced operations in January of this year.

Ungerer & Co. Vice-Presidents

Dr. Darrell Althausen (left) has been appointed vice-president and technical director and George V. Branigan has been made vice-president, according to an announcement by Ungerer & Co., New York. Dr. Althausen had previously been technical director of the company's plant in Totowa, N. J. Mr. Branigan has been associated with Ungerer since 1922 and will have his headquarters in the company's main office in New York.

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Armour Picks E. W. Wilson For Non-Food Division Post

Appointment of E. W. Wilson to the newly created position of group vice-president, supervising all non-food divisions of Armour & Co., Chicago, has been announced by the company. The non-food diviisons include Armour Auxiliaries, Armour Laboratories, Armour Fertilizer Works, Armour Leather Company, and Winslow Bros. & Smith Co.

Mr. Wilson has been vice-president and general manager of Armour Auxiliaries since 1949. F. B. Patton, general manager of the chemical division, replaces Mr. Wilson as general manager of the auxiliaries, and J. M. Hoerner succeeds Mr. Patton as general manager of the chemical division.

Minerals Processing Co. Chooses New President

Dr. J. Carl Behler has been elected president of Minerals Processing Company, LaGrange, Ga. Dr. Behler has served as a director of the company since its inception. Dr. Behler announced that arrangements have been made to sell a substantial amount of the production of washed scrap mica from its Hogg mine, near LaGrange, to Western Mica Company and Franklin Minerals Company.

Carlisle Elects Mullaly V. P.

Arthur L. Mullaly has been elected a vice-president of Carlisle Chemical Works, Reading, Ohio. Mr. Mullaly is executive vice-president of Advance Solvents & Chemical Company, Jersey City, N. J., a wholly owned subsidiary of Carlisle.

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Price Index Continues Drop

The overall OPD price index continued the drop it has been making in recent weeks by declining 0.03 point to stand at 106.79.

An extensive list of materials in the essential oils, aromatics and flavorings section moved lower, helping to produce the overall market index reduction. Bergamot and wormseed oils were off. Also reduced were decorticated Ceylon cardamom, Guatemalan and green Ceylon cardamom seed, Batavia cassia, Indian celery seed, Indian fennel seed, Moroccan fenugreek, niger seed, East Indian nutmeg, and Jamaican pimento. Advances were limited to Mexican and Spanish anise seed, Jamaican ginger, and black and white pepper.

The list of price changes in the oils, fats and waxes group was smaller than usual, and the index in this market eased off slightly. Lard dropped, as did crude coconut and plam kernel oils, and carnauba Ceara, chalky and Parnahyba waxes. Fatty linseed acid moved up, along with cottonseed meal, refined bees wax, and crude cottonseed and linseed oils. A firm tone prevailed in tallow and greases, despite limited trading.

In the heavy chemicals section, lithium salts showed reductions averaging from five cents to one dollar per pound, depending on the material. Not all of the chemicals were affected, but reductions in the main concentrates such as carbonate and hydroxide monohydrate were expected to make themselves felt in future pricing of the other derivatives. Mercury prices continued to edge off due to selling pressure and lack of demand. Silver bullion was higher due to increased activity in the London market.

Argentine casein firmed slightly, following action by the IAPI raising floor prices on casein by ½c. per pound during the week previous. Other prices in the protective coatings market were unchanged, while consuming demand continued at very active levels. A reduction in egg yolk constituted the only change in the textile and leather chemicals group. Demand levels for coal chemicals held up where they had been in previous weeks.

New York prices for dried blood firmed, and were the only advance in the agricultural chemicals group. Reductions were noted for fishmeal, fishscrap, hoofmeal, and tankage, the latter being a change in Chicago quotations. The peak season for consumption of some of the large volume fertilizers was believed by the trade to have passed last week, and opinions showed some variance in retrospect as to the success or failure of this season in comparison with past years. Potash producers, in noting that deliveries for the first quarter had set all-time records, were of the opinion that this year had been the best ever. There were no changes in quotations in the petroleum derivatives and in the industrial organic chemicals markets.

Prices Advanced

Acid, linseed fatty, 1 5c. per lb. (80).
Anise seed, Mexican, 1c. per lb. (59).
Spanish, 1c. per lb.
Blood, dried, N. Y., 25c. per unit-ton (61).
Cottonseed meal, $1 per ton (80).
Ginger, Jamaica, 1c. per lb. (59).
Oil, cottonseed, crude, ⅛c. per lb. (80).
Linseed, 1 5c. per lb. (80).
Pepper, black, Malabar, 3c. per lb. (59).
white, 2c. per lb.
Potassium stannate, 0.4c. per lb. (38).
Silver, 2¾c. per oz. (38).
Cyanide, 1¼c. per oz. (67).
Nitrate, 1⅝c. per oz. (67).
Sodium stannate 0.4c. per lb. (38).
Stannic chloride, 0.4c. per lb. (38).
Stannous chloride, anhyd., 0.6c. per lb. (38).
hydrous, cryst., ½c. per lb.
sulfate, 0.6c. per lb.
Tin, ⅝c. per lb. (38).
Wax, bees, refd., 1c. per lb. (80).

Prices Reduced

Cardamom seed, decorticated, Ceylon, 5c. per lb. (59).
Guatemalan, 5c. per lb.
green, Ceylon, 5c. per lb.
Cassia, Batavia, cracked, longstick, ½c. per lb. (59).
shortstick, ½c. per lb.
Celery seed, Indian, ½c. per lb. (59).
Copra, $5 per ton (80).
Egg yolk, 2c. per lb. (79).
Fennel seed, Indian, ½c. per lb. (59).
Fenugreek, Moroccan, 1c. per lb. (59).
Fishmeal, $10 per ton (61).
Fishscrap, $10 per ton (61).
Hoof meal, 25c. per unit-ton (61).
Lard, ¼c. per lb. (80).
Lithium carbonate, NF, 13c. per lb. (38).
tech., 5c. per lb.
Hydride, $1 per lb.
Hydrozide, monohydrate, 7½c. per lb.
Mercury, $3 per flask (38).
Niger seed, 1½c. per lb. (59).
Nutmeg, East Indian, 1c. per lb. (59).
Oil, bergamot, 25c. per lb. (59).
Coconut, crude, ⅜c. per lb. (80).
Palm kernel, ¼c. per lb. (80).
Wormseed, 25c. per lb. (59).
Pimento, Jamaica, 1c. per lb. (59).
Tankage, Chicago, 25c. per unit-ton (61).
Wax, carnauba, Ceara, refd., 1c. per lb. (80).
Chalky, 2c. per lb.
Parnahyba, crude, 2c. per lb.

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

May 13, 1955	May 6, 1955	May 14, 1954
106.79	106.82	108.34

Chemical Exports Rise In March; Imports Too

Foreign trade in chemicals and related products reached a value of $121,600,000 during March, an increase of $16,800,000 over the total for February and well ahead of the $92,700,000 recorded during March, 1954, according to preliminary estimates issued last week by the Bureau of the Census.

Exports during the month amounted to $93,300,000, an increase of $15,200,000 over February, while imports increased to $28,300,000 from the February total of $20,700,000. During March, 1954, exports amounted to only $66,700,000, while imports were valued at $26,000,000.

The bureau attributed the increase in both exports and imports to small advances in many of the individual commodities within the chemical group, rather than to any particular commodity alone. The trend in the trade was in keeping with that experienced for foreign trade as a whole.

Exports of all merchandise climbed from $1,231,600,000 in February to $1,341,-100,000 in March, while imports rose from $849,700,000 to $1,018,500,000. Exports were up $215,100,000 over March, 1954, and imports were up $156,200,000 over those of a year ago. Military exports were valued at $92,200,000 during March, as against $94,700,000 in February, and $203,400,000 in March, 1954.

Increases in exports were recorded in most of the industry groups. Exports of textile fibers and manufactures increased from $110,700,000 in February to $135,-600,000 in March. Exports of vegetable food products and beverages climbed from $126,700,000 to $142,400,000, primarily as a result of increases in exports of grains and preparations. However, a noticeable decline occurred in exports of refined cottonseed oil. Exports of edible animal products increased from $23,200,-000 to $29,300,000 in March.

Imports of textile fibers and manufactures rose from $69,400,000 in February to $101,600,000 in March. During the same period imports of vegetable food products and beverages increased from $221,400,000 to $247,000,000. Imports of non-metallic minerals rose from $124,100,-000 to $137,300,000, due primarily to higher imports of crude petroleum.

Olin Assigns New Duties To Four Top Executives

New duties for four of its executives were announced last week by Olin Mathieson Chemical Corporation, New York. Gordon Grand has been named vice-president for administration. W. J. Heckman has become vice-president for purchasing and transportation. R. E. McCormick has been appointed vice-president and secretary of the corporation, and D. G. Ward has become assistant vice-president for purchasing and transportation, as well as director of transportation.

Mr. Grand was formerly secretary of the corporation. He joined Olin Industries, Inc., in 1953, prior to its merger with Mathieson Chemical Corporation the following year. In his new post, Mr. Grand will be responsible for the personnel and industrial relations department, the public relations department, and the advertising and products publicity departments.

Mr. Heckman was appointed director of purchasing for Mathieson Chemical Corporation in 1953. His new duties will include supervising purchasing, transportation and trade relations at the corporate level. At the same time, he will continue as director of purchasing. Mr. McCormick joined Olin Mathieson earlier this year as general counsel. Mr. Ward joined Mathieson as general traffic manager in 1950.

Calumet Nitrogen Starts Work on Its Indiana Plant

Calumet Nitrogen Products Company, Chicago, recently organized by Standard Oil Company (Indiana) and Sinclair Refining Company, a subsidiary of Sinclair Oil Corporation, last week began construction of a plant at Hammond, Ind., to make anhydrous ammonia from by-product hydrogen. Reputedly the largest of its type, the Hammond installation is due to start production of farm plant food by May of next year. It will also manufacture nitrogen products for industry.

The new plant is slated to turn out 300 tons of anhydrous ammonia daily, according to J. H. Forester, president. Indiana Standard will operate the refinery for Calumet, but Standard and Sinclair each will market its portion of the output separately. The unit will be supplied with hydrogen from Standard's Whiting, Ind., refinery and Sinclair's East Chicago, Ind., refinery.

Spencer Marketing Manager

Mark B. Stringfellow has been appointed manager of market development, a newly-created position at Spencer Chemical Company, Kansas City, Mo. Mr. Stringfellow had previously been with Nopco Chemical Company and Carbide & Carbon Chemicals Company, a division of Union Carbide & Carbon Corporation.

Chemical Enterprises Tells Of Radco Fertilizer Merger

Chemical Enterprises, Inc., New York, has announced that the Radco fertilizer companies of southwestern Iowa have been merged with Chemical Enterprises. The merged firms consist of Radco Fertilizer Company, Radco-Eastern Division and Radco-Creston Division.

The announcement came jointly from Daniel B. Curll, jr., president of Chemical Enterprises, and Carl Reid, Don Allison and Homer Dudley, of Radco. The move, it was pointed out, provides Chemical Enterprises with a chain of ten anhydrous ammonia stations in the corn area along the Iowa-Missouri border.

The present management of Radco will remain unchanged. Two additional members have been elected to the Radco board. They are Mr. Curll and Tully W. Talbot, president of Chemco, a subsidiary of Chemical Enterprises serving west central Iowa. Radco is also active in the solid fertilizers field, it was pointed out.

Nuodex Makes Stewart Its Director of Research

William J. Stewart has been appointed director of research and development for Nuodex Products Company, Newark, N. J., a subsidiary of Heyden Chemical Corporation, Arthur Minich, president of Nuodex, has announced today. Mr. Stewart previously was chief of the protective coatings laboratory of Nuodex's research and development department. Frank X. Ritter has been appointed acting chief of the protective coatings laboratory, Mr. Minich said. Mr. Ritter was previously senior chemist in the laboratory.

Grace Spearheads Chemical Expansion Via New Division

J. Peter Grace, president of Grace Chemical Company, has announced the establishment of a new division to spearhead the company's anticipated further expansion in the chemical manufacturing and processing fields. At the same time, it was anounced that the main offices of the chemical company, now in New York, are being transferred to Memphis, Tenn.

The new organization, to be known as the Grace Chemical Research & Development Company Division, will be headed by William P. Gage, formerly president of Grace Chemical Company. Elwyn E. Winnie will be vice-president. Headquarters of the division will be in New York. The division will study new opportunities generally in the chemical industry, it was anounced.

William P. Gage

"The new division will be responsible for many chemical projects now in the study and planning stages," according to Mr. Grace, who noted that several of these projects are in fields not directly related to present chemical operations of the company. Among these are projects involving production of pure titanium metal, acetylene derivatives, and organic intermes

—Continued on page 86

Cokeoven Building Contract Given to Koppers Company

A contract to build a battery of thirty chemical-recovery cokeovens has been awarded to Koppers Company, Pittsburgh, Pa., by the U. S. Pipe & Foundry Company, Birmingham, Ala., it has been announced by G. M. Carvlin, vice-president and general manager of Koppers Engineering and Construction Division.

This is the second such contract to be awarded by this company to Koppers, who installed a similar battery for U. S. Pipe & Foundry in 1952. When the second battery is completed, U. S. Pipe & Foundry will have a total of 180 ovens capable of producing 3,500 tons of coke per day.

AIC Told Money Can't Measure Development

Success of commercial chemical development cannot be measured directly in money earned or saved, Dr. Thomas H. Vaughn, vice-president of Colgate-Palmolive Company, Jersey City, N. J., declared last week.

Speaking before the thirty-second annual meeting of the American Institute of Chemists in Chicago, Dr. Vaughn pointed out that development involved many factors beyond the control of any individual —changes in company policy or economic conditions, for instance. Thus, he said, it must be measured as achievement of objectives under existing circumstances in an individual company.

No company should tackle a problem in commercial chemical development beyond the scope of its pen, the speaker warned. He indicated that a firm should try for an answer with a minimum expenditure of time and money and should expect extra benefits beyond the solution of the economic problem. He cited as examples improved public and inter-company relations, generalization and development of new ideas and enthusiasm for new fields.

Role of Modern Management

Dr. Clifford S. Rassweiler, vice-chairman of Johns-Manville Corporation, New York, asserted that modern management is more than a boss giving orders. It is also a teacher, he said, adding that the chemist should think of it in this light, using it as a tool for getting his job done better.

Rather than giving direct orders, Dr. Rassweiler continued, modern management establishes policies and practices about how a responsibility should be carried out and the chemist should study these as a textbook from which he can learn to do his job more efficiently. He urged the chemist to study his management to see how he can use it to get the most effective climate for doing his work and the quickest and most efficient use of the things he develops.

People's actions are the result of motives. Dr. Mark E. Putnam, executive vice-president of Dow Chemical Company, Midland, Mich., told AIC. Unless management of the future increasingly studies and evaluates employee motives, Dr. Putnam said, it cannot do an effective and successful job of supervision. He felt that there is a shifting and variety of motivations which may not be recognized by production managers. Yet, he noted, to be successful, they must influence the actions of their men in many ways.

Value of Consultants Discussed

The consultant cannot do it alone; his employer must consciously take steps to make sure the consultant can efficiently do the job for which he was retained. So stated Paul W. Bachman, vice-president of the Davison Chemical Company, division of W. R. Grace & Co., Baltimore, Md. Unless the consultant is taken into complete confidence and provided with all the information he needs, he cannot render his best services, Mr. Bachman pointed out.

Dr. Ray P. Dinsmore, vice-president of research and development for Goodyear Tire & Rubber Company, Akron, Ohio, succeeded Dr. Donald B. Keyes as president of the institute. John H. Nair, assistant director of research for Thomas J. Lipton, Inc., Hoboken, N. J., was named vice-president for the fiscal year.

Monsanto Polystyrene Project In Argentina Gains Approval

Formal approval by the Argentine government has been given to the formation of Monsanto Argentina, S.A.I.C., and construction of a plant near Buenos Aires for the production of polystyrene will begin immediately.

Marshall E. Young, Monsanto Chemical Company vice-president and general manager of the company's overseas division, has announced that the Argentine company is a wholly-owned subsidiary of Monsanto Overseas S. A. The plant will be the first to provide polystyrene for the Argentine plastic molding industry.

Design and engineering work for the plant has been completed, and it is expected to be in production by early 1956. President of Monsanto Argentina, S.A.I.C. is Stanley D. Allchin, and the managing director is Enrique E. Krag, both of Buenos Aires.

Monsanto's investment in the Argentine subsidiary will be in the form of machinery, equipment, spare parts, and raw materials, as well as know-how. The Argentine company has been formed in conformance with a new Argentine law, No. 14222, which recently was issued controlling the investment of capital from outside that country.

Cosmetic Chemists Report Advances

New technological advances in the toilet goods field were detailed at the semi-annual technical meeting of the Society of Cosmetic Chemists, held May 13 at the Biltmore hotel, New York.

Discussing the topical uses of several antibiotics, William B. Baker of S. B. Penick & Co., New York, pointed out that such antibiotics as bacitracin, neomycin and tyrothrycin are used mainly for topical and other applications. They are also used orally, it was noted.

Mr. Baker said that the major goal of his particular study was to review the salient features of these antibiotics, and to present the status of some of the vehicles or bases that have been employed with them. He also suggested some vehicle formula similar to those which have been employed for other chemical agents and drugs, such as sulfonamides, as being adaptable for use with these antibiotics.

Past Data on Bases Cited

Various literature reports dealing generally with these antibiotics have included the subject of bases, he said. Some investigations have given logical reasons for preferring grease bases for topical application of medicaments, while others have favored aqueous bases where possible. Still others, it was noted, apparently do not think the nature of the base important because, in discussing applications and results, they mention that they use "an ointment, etc.," but do not state the formula.

In the cosmetic and allied fields, Mr. Baker asserted, there is at present no important literature pertaining to the use of antibiotics. This, he felt, is not surprising because many of the antibiotics such as penicillin, streptomycin and certain broad spectrum antibiotics have rather high incidences of sensitivity and development of drug resistance.

Use of Antibiotics in Cosmetics

However, it was stated, not all antibiotics have high incidences of sensitivity and drug resistance. Whether there are implications for the use of the several antibiotics in this category, in the cosmetic and allied fields, and the extent to which these implications exist, would, in Mr. Baker's view, seem to depend on the quantity and quality of researches carried out in this diretcion.

When employed topically, bacitracin, neomycin and tyrothrycin are virtually non-toxic and have documented records of extremely low incidences of sensitivity and resistance development, it was reported. In the pharmaceutical field, the speaker added, these drugs are permissible for use in products sold over-the-counter in drug stores. Neomycin and tyrothrycin in products must adhere to the provisions of the food, drug and cosmetic act, and a new drug application

—Continued on page 57

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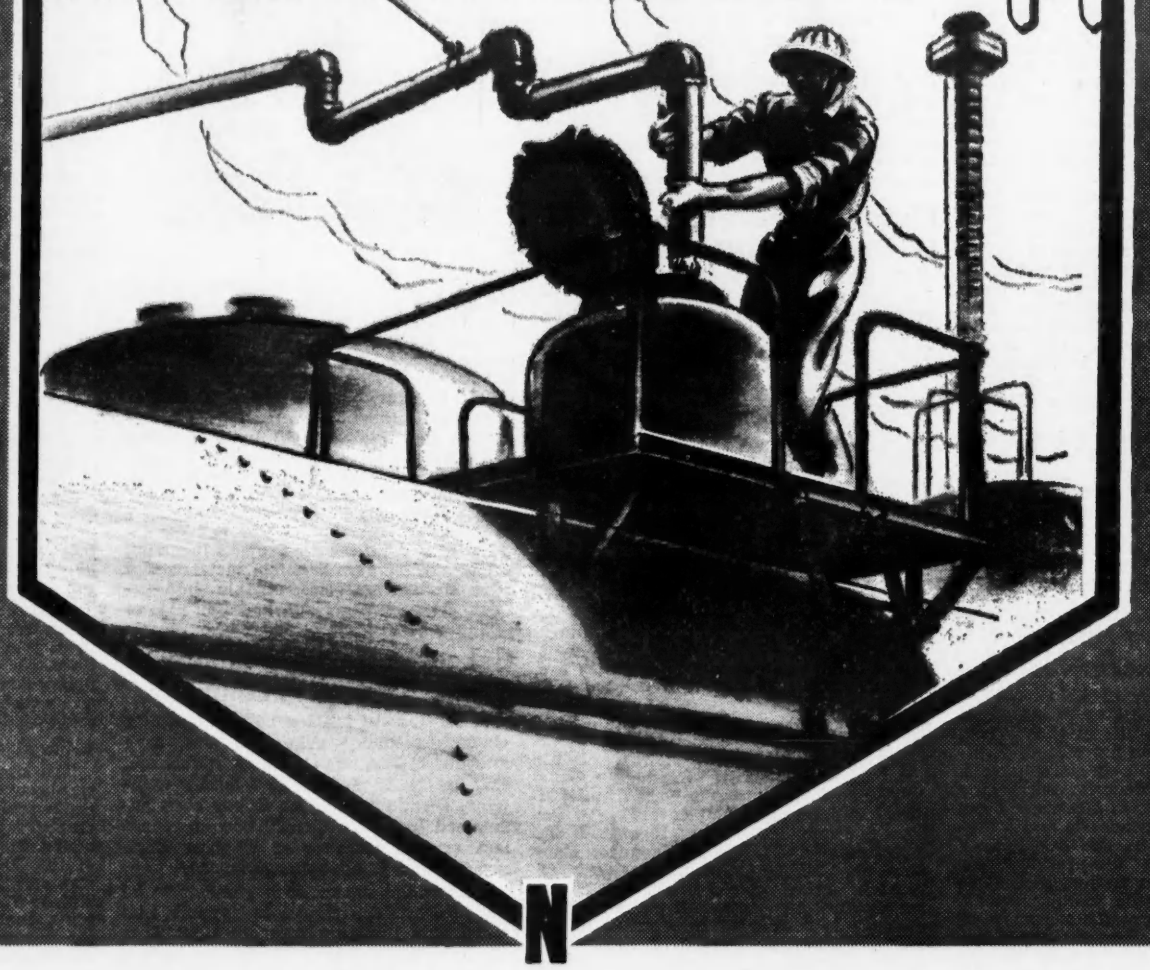

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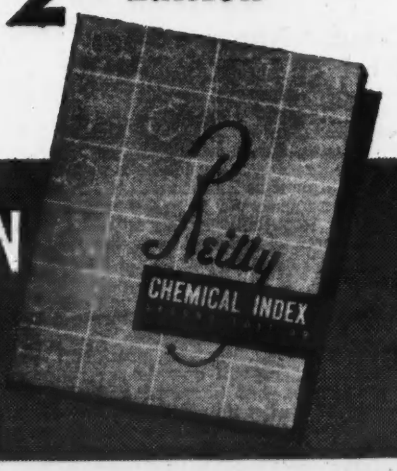

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Association Meetings

This Week

American Coke and Coal Chemicals Institute, regional meeting, Westchester Country Club, Rye, N.Y., May 16-17.
Chemical Market Research Association, annual meeting, Plaza hotel, New York, May 18-19.
Chemical Progress Week, May 16-21.
Chemical Specialties Manufacturers' Association, mid-year meeting, Drake hotel, Chicago, May 15-17.

Air Pollution Control Association, annual meeting, Detroit, Mich., May 22-26.
American Association of Textile Chemists and Colorists, Atlantic City, N. J., September 22-25.
American Council of Independent Laboratories, annual meeting, Westward Ho hotel, Phoenix, Ariz., November 8-11.
American Institute of Chemical Engineers, Lake Placid, N. Y., September 25-28; annual meeting, Statler hotel, Detroit, Mich., November 27-30.
American Petroleum Institute, annual meeting, St. Francis, Fairmount, Palace and Mark Hopkins hotels, San Francisco, November 14-17.
American Pharmaceutical Manufacturers Association, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., June 6-8, mid-year meeting, Waldorf-Astoria hotel, New York, December 12-14.
American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 26-July 1.
American Soybean Association, National Soybean Processors Association, joint meeting, Netherlands Plaza hotel, Cincinnati, Ohio, August 29-31.
American Water Works Association, annual conference, Chicago, June 12-17.
Armed Forces Chemical Association, annual meeting, Cleveland hotel, Cleveland, Ohio, June 16-17.
Association of Consulting Chemists and Chemical Engineers, forum and annual meeting, Belmont Plaza hotel, New York, October 25.
Atomic Industry Trade Fair, Sheraton-Park hotel, Washington, D. C., September 26-30.
British Plastics Exhibition, Olympic Stadium, London, June 1-11.
Chemical Institute of Canada, annual conference and exhibition, Quebec City, Quebec, May 30-June 1.
Chemical Market Research Association, Cavalier hotel, Virginia Beach, Va., September 22-23; joint meeting with CCDA, Carter hotel, Cleveland, Ohio, November 14-15.
Combined Pharmaceutical Contact Committee of ADMA and APMA, Sheraton-Park hotel, Washington, D. C., October 10-11.
Commercial Chemical Development Association, joint meeting with CMRA, Carter hotel, Cleveland, Ohio, November 14-15.
Drug, Chemical and Allied Trades section of the New York board of Trade, Pocono Inn, Pocono Manor, Pa., September 22-24.
Exposition of Chemical Industries, Commercial Museum and Convention Hall, Philadelphia, December 5-9.
Federation of Paint and Varnish Production Clubs, annual meeting, Statler hotel, New York, October 3-5.
Federal Wholesale Druggists Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., September 11-14.
Flavoring Extract Manufacturers Association, annual meeting, Edgewater Beach hotel, Chicago, May 22-25.
Forest Products Research Society, national meeting, Olympic hotel, Seattle, Wash., June 20-23.
Manufacturing Chemists Association, annual outing in conjunction with SOCMA, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-11.
National Association of Purchasing Agents, annual meeting, Waldorf-Astoria hotel, New York, May 29-June 1.
National Association of Retail Druggists, annual convention, Atlantic City, N. J., October 16-20.
National Chemical Exposition, Public Auditorium, Cleveland, Ohio, November 27-30.
National Cottonseed Products Association, annual meeting, Jung hotel, New Orleans, La., May 23-24.
National Foreign Trade Council, annual foreign trade convention, Waldorf-Astoria hotel, New York, November 14-16.
National Paint, Varnish and Lacquer Association, annual convention, Shoreham and Sheraton-Park hotels, Washington, D. C., October 31-November 3.
National Petroleum Association, annual meeting, Traymore hotel, Atlantic City, September 14-16.
National Plant Food Institute, Greenbrier hotel, White Sulphur Springs, W. Va., June 12-15.
National Soybean Processors Association, American Soybean Association, joint meeting, Netherlands Plaza hotel, Cincinnati, Ohio, August 29-31.
Packaging Machinery Manufacturers Institute, annual meeting, The Homestead, Hot Springs, Va., September 15-18.
Paint Industries' Show, Statler hotel, New York, October 3-5.
Proprietary Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 23-25
Society of the Chemical Industry, annual meeting, University of Birmingham, Birmingham, England, July 11-16.
Synthetic Organic Chemical Manufacturers Association, annual outing in conjunction with MCA, Greenbrier hotel, White Sulphur Springs, W. Va., June 10-11; annual dinner, Commodore hotel, New York, December 1.
World Petroleum Congress, Rome, June 6-15.
World Plastics Fair and Trade Exposition, National Guard Armory, Los Angeles, October 5-9.

Picco Research Director

Dr. William J. Roberts has been appointed director of research for Pennsylvania Industrial Chemical Corporation, Clairton, Pa. Dr. Roberts replaces Dr. A. L. Ward, who has retired. Nicholas C. Gangeni will fill Dr. Roberts' former post as assistant director of research.

Grace Board Chairmanship Goes to Charles E. Wilson

William Grace Holloway, chairman of the board of W. R. Grace & Co., New York, resigned last week and was succeeded by Charles E. Wilson, chairman of the firm's executive committee and former president of General Electric Company. Mr. Wilson's election marked the first time in the history of the 101-year-old company that a member of the Grace family has not headed the board of directors.

Mr. Wilson joined Grace in 1952 as a director and consultant following fifty-one years of service with General Electric, of which he became president in 1940. During World War II he served as executive vice-chairman of the War Production Board, with authority over all United States war production. Soon after the outbreak of the Korean War he resigned as president of General Electric and became the first Director of Defense Mobilization.

During his forty-seven years with Grace, Mr. Holloway served the firm in many capacities. His duties frequently took him to Grace offices in Europe and South America as well as to those throughout this country. As resident manager in charge of the organization's business in Peru, he lived for eight years in Lima. Mr. Holloway also lived in London for seven years when he was chairman of Grace Bros. & Co., Ltd. He was elected a vice-president of W. R. Grace & Co. in 1922, a director in 1929, and treasurer in 1936. In 1945 he was elected chairman of the board.

Antibiotic Development Told By Team of Merck Chemists

A new antibiotic, claimed to be effective against tuberculosis, enteritis, certain types of pneumonia and genito-urinary and skin infections, was unveiled yesterday by a chemical research team of Merck & Co., Rahway, N. J.

Named oxamycin, the new agent is reported to enhance the activity of such well-known antibiotics as penicillin in laboratory tests. It is too early to evaluate the importance of oxamycin to medicine, the Merck researchers stated, but clinical tests are now under way.

Oxamycin is reported to be identical with an antibiotic discovered at the same time by scientists of the Commercial Solvents Corporation, New York. The description of oxamycin, known chemically as D-4-amino-3-isoxazolidone, is contained in the current issue of the *Journal of the American Chemical Society.*

Parke, Davis Will Build Producing Unit in Canada

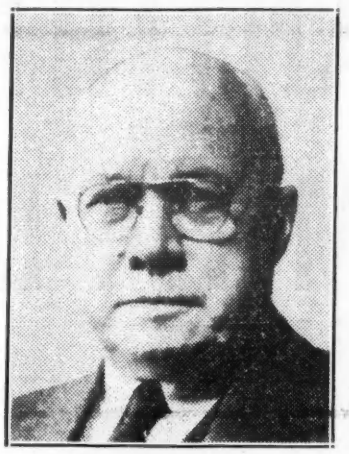
Parke, Davis & Company, Detroit, Mich., has announced plans to build a multi-million dollar pharmaceutical manufacturing laboratory at Brockville, Ontario, Canada. Construction is scheduled to begin immediately, with completion planned for mid-1956.

The three-unit facility, containing approximately 150,000 square feet of floor space, will include a main manufacturing building, an adjoining boiler and electrical substation, and a separate garage. It will be located on twenty acres.

Dr. Carle M. Bigelow Dies, Long a Cyanamid Executive

Dr. Carle M. Bigelow, consultant and former assistant to the general manager of the fine chemicals division of American Cyanamid Company, New York, died May 10 in Somerville, N. J. He was sixty-five years old.

Dr. Bigelow had been associated with Cyanamid since 1934, when he joined the Calco Chemical Division as director of the pharmaceutical department. Before joining Cyanamid, Dr. Bigelow was an industrial engineer with Sayles Finishing Plants, Saylesville, R. I., from 1912 to 1916, and chief engineer for Cooley & Marvin, Boston, from 1916 to 1924. From then until 1935 he was president of Bigelow, Kent, Willard & Co., also of Boston.



Dr. Carle M. Bigelow

During World War II Dr. Bigelow was a member of the Drug Resources Committee, and organized and directed the medical supplies section of the British Purchasing Commission.

Dr. Bigelow was a member of the American Drug Manufacturers Association; American Pharmaceutical Manufac-

—*Continued on page 76*

Chemical Progress Week Observances Begin Today

Beginning today and continuing through this week, the chemical industry will observe the second Chemical Progress Week by explaining to the nation how chemical products and research serve the American people in almost every activity of their daily life.

According to national Chemical Progress Week headquarters in Washington, D.C., observances will be held in virtually every city and town in the United States in which chemical production, sales or research activities are conducted. There are over 11,000 such establishments in the country, located in every state, every major metropolitan center, and in hundreds of smaller communities.

William C. Foster, president of the Manufacturing Chemists' Association and national chairman for Chemical Progress Week, has announced that special emphasis is being placed on the education aspects as part of the industry's continuing effort to interest more young people in technical and scientific careers. During the week, chemical industry representatives will make speeches to civic, professional, school and service groups. Plant visits will be held, essay contests conducted and displays will appear in store windows, libraries and schools. Over a dozen states and hundreds of municipalities have officially proclaimed Chemical Progress Week.

Chemical Market Research Conference May 19 in L.A.

The Chemical Market Research Group of Southern California will hold its annual symposium May 19 at Rodger Young Auditorium, Los Angeles.

The following topics will be discussed:—"Chemicals from Sea Water on the Pacific Coast," by J. Gilbert Miller, of Westvaco Mineral Products Division, Food Machinery & Chemical Corporation; "Algin—Harvest of the Sea," by Dr. Arnold B. Steiner, Kelco Company; "The Technics of Chemical Economics," by Frederick H. Good, Stanford Research Institute; "The Photographic Industry of Southern California," by Ralph Atkinson, Atkinson Color Processing Laboratory; "What's Happening in the Fertilizer Industry in California," by James Quinn, California Sun Fertilizer Company, and "Petrochemicals Industry, West Coast and National" by Christian J. Mathews, Arthur D. Little Company.

Virus-Growing Strides Told to Bacteriologists

The Society of American Bacteriologists was told last week that the difficult task of growing viruses in quantity in a test tube is a step nearer solution. The society, holding its fifty-fifth annual meeting in New York, heard Drs. Murray Sanders, M. G. Soret and Eloy Padron, of the University of Miami, report that they had grown, on the embryonic tissues of simple animals, viruses which cause diseases in man.

They were able to grow in the test tube on the tissues of fish and earth worm embryos, the virus which causes a paralytic disease called eastern equine encephalomyelitis. These studies also suggest that there exist a greater variety of virus carriers than is generally believed, the doctors reported.

Eye Infection Research

Several groups of scientists reported having isolated a variety of viruses that cause severe eye infection in man and arthritis in poultry. Drs. E. Jawetz, S. Kimura and their co-workers, of the University of California Medical Center in San Francisco, reported having isolated from epidemic kerato-conjunctivitis in man the virus which apparently causes this disease. They found that the virus could be grown on egg embryos or on human cancer tissue in the test tube.

Investigating a new type of arthritis in poultry, Drs. J. G. Lecce, F. G. Sperling, L. Hayflick and W. R. Stinebring, of the University of Pennsylvania, found that the cause of the disease was a large virus which could be grown in the yolk sac of fertiled eggs. Isolated from infected chickens, the disease proved susceptible to the antibiotics "Terramycin," "Aureomycin," the group reported.

Though the Salk vaccine represents a long step to the eradication of polio in humans, the search for animal carriers of the disease continues in the laboratories, the society was told. Research thus far has failed to implicate domestic pets such as cats and dogs but cows are still under suspicion, it was reported. Drs. P. Bartell and M. Klein of Temple University, Philadelphia, declared that they had found polio virus antibodies of all three types in cow sera.

Age Makes Difference

Age, they discovered, makes a difference. For while all calves (three to six months old) examined showed no anti-viral agents in their blood, the presence of these antibodies increased sharply in steers (one to two years old) and went even higher in cows (seven to fourteen years old).

Prevention of diarrheal disease, often serious in infants, may be a step nearer fulfillment, it was disclosed. Drs. Merlin L. Cooper, Edward W. Walters and Helen M. Keller, of the Children's Hospital Research Foundation and department of pediatrics, University of Cincinnati, reported that infantile diarrhea may be caused by special types of the microbe escherichia coli. Drs. Cyril S. Stulberg and Wolf Zuelzer of the Child Research Center, Detroit, reported having found a similar type of E. coli in an epidemic and noted that the antibiotic neomycin proved highly effective in controlling it.

Major C. D. Graber and his co-workers of the Fitzsimmons Army Hospital and the department of microbiology, University of Colorado Medical School, Denver, also im-

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Pharmacy Seen Needing Improved Public Relations

Establishment of a public relations office for the pharmaceutical industry "to serve as a watchdog and spokesman for the common interests of the industry" was suggested at the fourth annual Rutgers Pharmaceutical Conference in New Brunswick, N. J., last week. G. Frederick Roll, public relations manager for the Smith, Kline & French Laboratories, Philadelphia, speaking at the meeting said:—

"I suggest, as a first step, that the leaders of the industry set up a steering committee composed of their own public relations people. I suggest that this group, in turn, be empowered to set up within the framework of one of the trade organizations, a public relations office, with a modest but adequate staff, to serve as watchdog and spokesman for the common interests of the industry. I need hardly go on playing for this audience a theme of persuasion that the drug industry needs and deserves a public relations program."

Reporting on a survey taken for the conference on "The Consumer Looks at

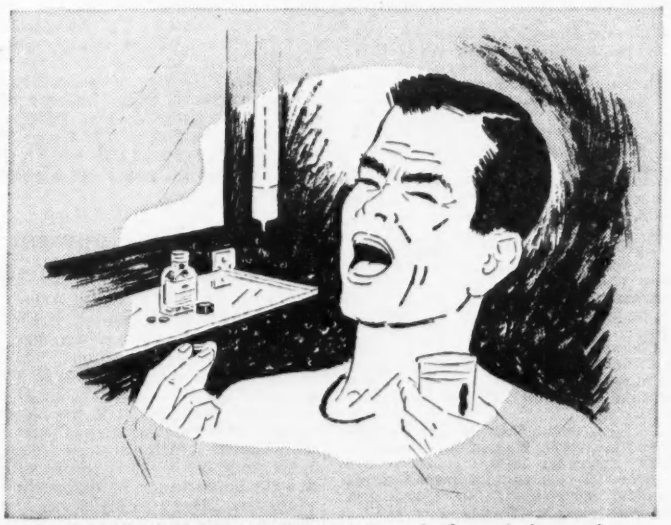
—*Continued on page 83*

A VERSATILE ANTIHISTAMINE PYRILAMINE MALEATE MERCK

LOTIONS, CREAMS, AND OINTMENTS: PYRILAMINE MALEATE MERCK can be a valuable component of any of these formulations. Its outstanding effectiveness as a histamine antagonist can build consumer acceptance for your dermatologic preparations.

COLD TABLETS AND SYRUPS: PYRILAMINE MALEATE MERCK is compatible with a wide variety of analgesics and antipyretics commonly used in cold preparations. Its substantial margin of safety makes pyrilamine especially suitable for over-the-counter products of this type.

COUGH SYRUPS: The local anesthetic properties of PYRILAMINE MALEATE MERCK add a soothing quality to cough formulations and its antihistaminic action reduces allergy-induced congestion, if present. Because of these advantages pyrilamine can help popularize your product.



ALLERGY PREPARATIONS: Assistance in formulating antiallergy preparations and other products containing PYRILAMINE MALEATE MERCK is available on request. Merck will also supply information on approved dosage levels and other technical and commercial data.

Research and Production for the Nation's Health

MERCK & CO., INC.
Manufacturing Chemists
RAHWAY, NEW JERSEY

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Current Market Quotations

Chemicals and Related Materials

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Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, May 13 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).
Acenaphthene, below 92.5 C., m.p., dms. works lb. .40 - —
above 92.5 C., m.p., bbls., dms., works lb. .41 - .50
Acetaldehyde, 99% dms., c.l., frt. equald lb. .1250 - .1435
l.c.l. frt equald lb. .1350 - .1535
tanks, frt equald lb. .1050 - .1300
Acetaldol (see Aldol)
Acetanilide, tech., bbls. c.l., dlvd lb. .29 - —
ton lots lb. .30 - —
smaller lots lb. .30½ - —
USP, bbls. 2,000-lb. lots lb. .80 - —
smaller lots lb. .81 .86
Acetic anhydride, dms. c.l. dlvd E. lb. .15¼ - —
l.c.l., dlvd E lb. .17 - —
tanks, dlvd E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib., dms., c.l., dlvd lb. 1.33 - —
l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
l.c.l., dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .09 - —
l.c.l., dlvd. lb. .10 - —
tanks, dlvd. lb. .07 - —
Methyl (see M)
Acetonitrile, dms., c.l., works lb. .45 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt equald lb. 1.17 - 1.19
Acetophenone cns. dms lb. 1.21 - 1.85
tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol dms., frt. adjusted lb. 1.75 - 1.85
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks, frt. alld. E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l., frt. alld E of Denver. lb. .40 - —
tanks, frt. alld. E. of Denver. lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —
Acid, abietic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490 - —
eryst., dms. c.l. works lb. .06½ - —
l.c.l. works lb. .07 - .07½
Acetic, coml., or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls 100 lbs 8.25 - —
70%, bbls 100 lbs. 9.95 - —
80% bbls 100 lbs. 10.45 - —
glacial, syn., CP, dms., dlvd. 100 lbs. 15.00 - 16.00
tech., dms., c.l., dlvd 100 lbs. 12.00 - —
l.c.l., same basis 100 lbs. 13.00 - —
tanks, dlvd 100 lbs. 10.00 - —
USP chys., inclusive, dlvd., 100 lbs. 24.00 - 25.00
Acetic anhydride (see Acetic anhydride above).
Acetylsalicylic, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63 - —
standard, fine, cryst., gran., (30-40 mesh) powd., (80 mesh) bbls., 1,000-lb. lots, lb. .58 - .60

Freight equald, shipt, identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.

Adipic, fib. dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .37½ - —
Aminoacetic, NF, bbls., frt. adjusted lb. 1.50 - 1.75
p-Aminobenzoic, tech., dms., works lb. 1.74 - 1.77
USP, dms., 1,000-lb. lots or more, works lb. 2.50 - —
smaller lots, works lb. 2.55 - 2.60
p-Aminosalicylic, dms., 1,000-lb. lots or more, frt. adjusted lb 4.00 - —
smaller lots, same basis lb 4.05 - 4.50
Anthranilic, bbls., frt equald lb 1.21 - —
Arsenous, tech., (see Arsenic, white).
USP (see Arsenic trioxide).
Ascorbic USP, dms., 25-100 kilo lots kilo.16.00 - —
10-kilo lots kilo.16.35 - —
5-kilo lots kilo.16.75 - —
bots 1-kilo lots kilo.17.00 - —
500-gram lots kilo.17.50 - —
Battery, cbys., c.l., works, E. 100 lbs. 2.35 - —
l.c.l., works, E 100 lbs. 2.65 - 3.45
Benzoic, tech., bbls., dms., 100-lb. lots or more lb. .44 - —
USP, bbls., dms., 100-lb. lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid b-Oxynaphthoic).
Boric, tech., 99½%, cryst., bgs., c.l., works ton.124.25 - —
ton lots, ex whse, N. Y. or Chi ton.172.00 - —
smaller lots, same basis. ton.177.00 - —
bbls., c.l., works ton.148.75 - —
ton lots, ex whse, N. Y. or Chi ton.196.50 - —
smaller lots, same basis. ton.201.50 - —
gran., bgs., c.l., works ton.99.25 - —
ton lots, ex whse, N. Y. or Chi ton.147.00 - —
smaller lots, same basis. ton.152.00 - —
bbls., c.l., works ton.123.75 - —
ton lots, ex whse, N. Y. or Chi ton.171.50 - —
Acid, boric, tech., gran., smaller lots, same basis ton.176.50 - —
bulk, c.l., works ton.94.25 - —
powd., bgs., c.l., works ton.104.25 - —
ton lots, ex whse, N. Y. or Chi ton.152.00 - —
smaller lots, same basis. ton.157.00 - —
bbls., c.l., works ton.128.75 - —
ton lots, ex whse., N. Y. or Chi ton.176.50 - —
smaller lots, same basis. ton.181.50 - —
Boric acid in kegs $45.50 per ton higher than in paper bgs. USP boric Acid $25 per ton higher.
Broenners bbls lb. 1.76 - —
Butyric, 99% dms., c.l., works, lb. .34 - —
l.c.l., works lb. .34½ - —
tanks, works lb. .32½ - —
Capric, dms lb. .24 - .26
Caprylic, dms. lb. .24 - .26
Cassella, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Castor oil, split, dms lb. .35½ - .36
Chicago, bbls. frt alld lb. 3.21 - —
Chloroacetic, mono-, purif., flake, 99%, dms lb. .23½ - .25½
tech., flake, 96-97%, frt. equald, dms lb. .20 - .21
o-Chlorobenzoic, fib. dms., works lb. 1.13 - —
p-Chlorobenzoic, fib dms., works lb. 1.59 - 1.63
Chlorosulfonic, dms., c.l., frt. equald lb. .0465 - —
l.c.l., frt. equald lb. .0515 - —
tanks, frt. equald lb. .0415 - —
Acid, chlorosulfonic, in stainless steel dms. ½c. per lb. higher.
Cholic, 100-lb. lots, fib. dms. lb. 6.00 - 6.25
Chromic 99¾%, dms., c.l., works lb. .27½ - —
l.c.l., works lb. .28 - .29
NF (see Chromium trioxide).
Cinnamic, refd., bots lb. 2.50 - 3.50
Citric, USP, anhyd., gran., fine gran dms., c.l lb. .28¾ - —
10,000-lb lots, 1 shipt, lb. .29¼ - —
smaller lots lb. .29¾ - .31¼
Acid, citric, USP, hydrous, gran., fine gran., dms., c.l lb. .27 - —
10,000-lb lots, 1 shipt, lb .27½ - —
smaller lots lb. .28 - .29½
Powdered citric acid ½c. higher.
Cleve's, mixed, bbls lb. .79 - —
Coconut oil, dist., dms lb. .25 - .27
tanks lb. .23 - —
dbl. dist., dms lb. .25¾ - .27¼
tanks lb. .23¾ - —
Corn oil, dist., dms lb. .15¾ - .17¾
tanks lb. .1350 - —
Cottonseed oil, dist., dms lb. .1525 - .1723
tanks lb. .1325 - —
2,3-Cresotic, dms. ton lots, works. lb. .66 - —
less than ton lots lb. .68 - —
Cresylic, coaltar dom. 50% 207 C or above ref dms. c.l. frt. equald gal. .98 - —
l.c.l., same basis gal. 1.03 - —
non-ret. dms. c.l., same basis gal 1.01 - —
l.c.l. same basis gal. 1.04 - —
tanks, same basis gal. .90 - —
204° to 207 C., ret., dms., c.l., same basis gal. 1.03 - —
l.c.l., same basis gal 1.08 - —
non-ret. dms c.l same basis gal. 1.06 - —
l.c.l. same basis gal. 1.09 - —
tanks same basis gal. .95 - —
imp., 75% at 215°C. or over, dms., ex wrse gal. .75 - .90
petroleum, dom., 193° to 214°C., non-ret. 65 dms. to c.l., works, San Francisco and Los Angeles gal. .75 - —
l.c.l., same basis gal. .77 - .79
tanks, works, frt. alld. E. gal. .71 - —
200° C to 222° C., tanks, Wilmington, Cal gal. .62 - .69
211° C to 237° C., non-ret, dms., c.l., San Francisco and Los Angeles gal. .67 - —
l.c.l., same basis gal. .69 - .71
tanks, same basis gal. .54 - —
220° C. to 242° C., tanks, Wilmington, Cal gal. .54 - .59
245° C. to 298° C., tanks, Wilmington, Cal gal. .50 - —
Crotonic, fib. dms., 200 lbs. or more, works lb. .50 - —
Cyanoacetic, tech., bbls lb. .90 - 1.25
Dehydrocholic, injection, fib dms. 100-lb. lots lb. 12.25 - —
oral, fib. dms., 100-lb. lots lb. 9.25 - —
Acid, desoxycholic, fib. dms., 100-lb. lots lb. 14.00 - —
Dichlorophenoxyacetic (see under D 2,4-D)
Diethylbarbituric (see Barbital)
Diglycolic, bgs. works lb 14 - —
2-ethyl hexoic, dms., c.l., works lb. .36½ - —
l.c.l., works lb. .37½ - —
tanks works lb. .34½ - —
F, crude, paste, bbls., works lb. 2.10 - —
Folic, bots fib cns kilo lots or more gram. 1.40 - —
Formic, 85%, cbys., c.l., works lb. .1570 - —
l.c.l., works lb. .1620 - .1720
90%, cbys c.l. works lb. .1625 - —
l.c.l. works lb. .1675 - .1775
Fumaric tech., bgs., dms lb. .27 - .28
Gallic, NF VII bbls. 1,000 lb lots lb. .80 - —
smaller lots lb. 1.82 - 2.00
tech., bbls., 1,000-lb. lots lb. 1.58 - —
smaller lots lb 1.69 1.78
Gamma, dry, grd. bbls., frt. alld. lb. 1.50 - —
paste bbls frt alld lb 1.45 - —
Gentisic, 100-lb fib dms lb 8.50 - —
Gluconic, tech., 50% bots lb. .25 - .35
cbys. lb. .19 - —
dms. lb. .15½ - —
l-Glutamic, 99½% fib. dms., 100-lb lots works lb 2.45 - 2.53
25 lb lots, works lb 2.54 2.60
Glycerophosphoric, 35%, dms., works lb. 2.25 - 2.35
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., c.l., works, 100% basis lb. 1.00 - —
l.c.l., same basis lb. 1.02 - —
Hydriodic, 1.50 s.g., cbys lb 2.94 - —
1.70 s.g., cbys lb 3.23 - —
Hydrocinnic, medicinal, 48%, cbys, divd E (1) .37 - .43
Hydrochloric, anhyd. (see Hydrogen chloride).
18° cbys., c.l., works 100 lbs. 2.50 - —
l.c.l., dlvd Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt equald ton.28.00 - —
20° cbys., c.l., works 100 lbs. 2.75 - —
l.c.l., dlvd Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt equald ton.30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
l.c.l. dlvd Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt equald ton.35.00 - —
CP, USP, consumers, cbys., extra c.l. works lb. .11¾ - —
l.c.l. same basis lb. 13¼ - .13¾
5-pint bots., extra, cs., c.l., same basis lb. 16¾ - —
l.c.l., same basis lb. .18¼ - .19¼
Acid, hydrochloric, CP, USP prices to dealers 1c per lb. less.
Hydrocyanic, cyls. frt. alld lb. .75 - .95
dilute NF 2% 5 lb bots lb 40 - —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
tanks, works lb. .21 - —
70%, steel dms., works lb. .18½ - .22½
Hydrofluosilicic, basis 30%, dms., works lb. .06 - —
Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks, Belle, W Va., 100% basis lb. .095 - —
Hypophosphorus, purif., 50%, cbys lb. 1.30 - 1.32
USP, cbys lb 88 - —
Isonicotinic 100 lb fib dms. works lb. 5.00 - —
Itaconic, fib. dms., c.l., works lb. .59 - —
l.c.l., works lb. .60 - —
Hydrazide (see Isoniazid).
J, bbls., works, 100% basis lb. 2.50 - 2.85
Koch, bbls., frt. alld lb. .64 - .70
L, bbls. works lb. 1.25 - —
Lactic, edible, 50%, bbls., 20 or more lb. .1734 - .215
smaller lots lb. .1834 - .225
80%, bbls., 5 or more lb. .3054 - .37
smaller lots lb. .3104 - .377
plastic grade, 50%, bbls., 20 or more, works lb. .23 - —
1 to 19 lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech., 22%, bbls., c.l., works 100 lbs. 6.30 - —
l.c.l., works 100 lbs 6.70 - —
cbys., l.c.l., works 100 lbs. 12.20 - —
44%, bbls., c.l., works 100 lbs. 11.45 - 11.95
l.c.l., works 100 lbs. 11.85 - 12.35
USP, 85%, cbys. lb. .85 - .88
Laurent's, bbls lb. .60 - —
Lauric, dms. lb. .36¼ - .38¼
Linseed oil, dist., dms lb. .1875 - —
w.w., dms. lb. .2175 - —
Maleic, cryst., powd., dms lb. .37 - .38
Malic, tech., dms lb. .50 - —
Mandelic, NF, dms., 1,000-lb. lots. lb. 2.33 - —
smaller lots lb. 2.40 - 2.50
Metanilic, dms., works lb. .57 - .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .54½ - —
smaller lots, works lb. .55 - —
Molybdic, 85-92%, dms., works lb. 1.32 - —
Monochloroacetic purif. (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms lb. .28 - .29¾
Naphthenic, 220-230 acidity, dms., works lb. .13¼ - —
tanks, works lb. .11¼ - —
Naphthol (1)-4-sulfonic (see Acid Nevile and Winthers)
Naphthol(1)-5-sulfonic (see Acid, L).
Naphthol(1)-5-sulfonic,8-amino (see Acid, S).
Naphthol(1)-3,6-disulfonic,8-amino (see Acid H).
Naphthol(2)-6,8-disulfonic (see Acid, Gamma)
(5)-7-Sulfonic-2-amino (see Acid, J).
Naphtholsulfonic, mixed (see Acid, Cleve's, mixed).
Naphthylamine(1)-5-sulfonic (see Acid, Laurent's).
(2)-6-sulfonic (see Acid, Broenner's)
(2)-7-sulfonic (see Acid, F).
(2)-1-sulfonic (see Acid, Tobias)

Abbreviations
Used in OPD Market Quotations

alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
a.p.a.	available phosphoric acid
approx.	approximately
artif.	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystal
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist.	destructive-distilled
dl-	dextro-laevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E	east
e.p.	end point
equald.	equalized
exp.	expressed
F	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
I.&a.	iron and aluminum
I.b p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less than carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
pow.d.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S. E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
ship't	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truck loads
t.w.	tank wagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Acid, Nevile & Winther's—Alcohol, Diacetone

Acid, Nevile and Winther's, dms., frt. alld lb. 1.20 - —
Nicotinic, USP, dms., frt. adjusted kilo 8.00 - 8.30
Amide, USP. (see Nicotinamide).
Nitric 36° Be cbys., c.l., works, E. 100 lbs. 5.75 - —
l.c.l., works, E ....100 lbs. 6.05 - 6.85
38° Be cbys., c.l., works, E. 100 lbs. 6.25 - —
l.c.l., works, E ....100 lbs. 6.55 - 7.35
40° Be, cbys., c.l., works, E 100 lbs. 6.75 - —
l.c.l., works, E ....100 lbs. 7.05 - 7.85
42° Be cbys., c.l., works, E. 100 lbs. 7.25 - —
l.c.l., works, E ....100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumers, cbys., extra c.l., works lb. .13½- —
l.c.l., same basis .. lb. .15 - .15½
5 pint bottles, extra, cs., c.l., same basis lb. .17½- —
l.c.l. same basis lb. .19 - .25
p-Nitrobenzoic, dms., c.l., works lb. .72 - —
l.c.l., works ..... lb. .73 - —
Oleic, s.d., dms ..... lb. .17½- .19½
tanks ..... lb. .15½- —
dbl. dist. (white), dms ..... lb. .20 - .22
tanks ..... lb. .1800- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Cresotic).
Oxalic, bbls., c.l., works ..... lb. .16½- —
10,000-lb. lots, works ..... lb. .16¾- —
smaller lots, works ..... lb. .17¾- —

Acid, b-oxynaphthoic, bbls., works. lb. 1.14 - —
Palm oil, dbl., dist., dms ..... lb. .14¼- .16¼
Para-aminobenzoic (see Acid, p-Aminobenzoic)
Para-aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid, p-Chlorobenzoic)
Paramethylphenylcinchonic (see Neocinchophen)
Paranitrobenzoic (see Acid p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid, p-Toluidine m-sulfonic)
Phenylacetic, pure, cryst. cns. lb .75 - 1.70
Phenylcinchoninic (see Cinchophen).
Phenylglycolic (see Acid, mandelic).
Phosphoric, food grade, 75%, cbys., c.l., frt. alld E 100 lbs. 6.50 - —
l.c.l., works .... 100 lbs. 7.25 - —
tanks, works .... 100 lbs. 5.10 - —
NF, 85%, cbys., c.l., works lb. .08 - —
l.c.l., works ..... lb. .08½- —
Picric, NF, bbls. ..... lb. .60 - —
tech., bbls. ..... lb. .34 - .35
Propionic, syn., pure, dms., c.l., works lb. .21 - —
l.c.l., works ..... lb. .22 - —
tanks, works ..... lb. .19 - —
Pyrogallic, NF, (see Pyrogallol).
tech., bbls ..... lb. 2.76 - 2.99
Ricinoleic (see Acid, castor oil, split).
S., bbls., works ..... lb. 3.25 - —
Salicylic, crude, fib. dms ..... lb. .37 - —
sublimed, tech., fib. dms., c.l. lb. .39 - —
l.c.l. lb. .46 - —
dyestuffs grade, fib. dms lb. .41 - —
USP, cryst., fib. dms .... lb. .48 - —
powd., fib. dms ..... lb. .53 - —
Sebacic, purif., dms., c.l., works. lb. .64 - —
l.c.l., works ..... lb. .66 - .70

Acid, soybean oil, dbl. dist., dms. lb. .18 - .30
tanks ..... lb. .1600- —
s.d., dms ..... lb. .16½- .18½
tanks ..... lb. .14½- —
Stearic, dbl. pressed, bgs ..... lb. .14¼- .16¼
single pressed, bgs ..... lb. .13¾- .15¾
triple pressed, bgs. ..... lb. .16½- .18½
Succinic, purif., cryst., bbls., works lb. .62 - .75
Sulfanilic, tech., dms., c.l., frt. alld. lb. .19 - —
l.c.l., frt. alld ..... lb. .21 - —
Sulfuric, 60° Be, cbys., c.l., works. 100 lbs. 2.00 - —
l.c.l., works .....100 lbs. 2.45 - —
tanks, works ..... ton.18.60 - —
66° Be, cbys., c.l., works. 100 lbs. 2.25 - —
l.c.l., works .....100 lbs. 2.55 - 3.35
tanks, works ..... ton.22.35 - —
98%, tanks, works ..... ton.23.50 - —
99-100%, tanks, works ..... ton.23.95 - —
CP, NF, consumers cbys. extra, c.l., works, frt. equald. lb. .09¾- —
l.c.l., same basis ... lb. .11¼- .11¾
5 pt. bots., extra cs., c.l., works, frt. alld. lb. .13¼- —
l.c.l., same basis lb. .14¾- .15¾
oleum, 20%, tanks, works ton.25.00 - —
40%, tanks, works ..... ton.29.00 - —
65%, tanks, works ..... ton.39.50 - —
Tallow, dist., dms ..... lb. .14¼- .16¼
hydrogenated, bgs ..... lb. .13¼- .15¼
Tannic, NF, fluffy, bbls., 1,000-lb. lots lb. 1.80 - —
smaller lots ..... lb. 1.81 - 1.85
powd., bbls., 1,000-lb. lots lb. 1.70 - —
smaller lots ..... lb. 1.71 - 1.76
tech., dms ..... lb. .93 - —

Acid, tartaric, USP, dom., 230 or 250-lb. dms., c.l ..... lb. .44 - —
10,000-lb. lots, 1 shipt lb. .44½- —
smaller lots ..... lb. .45 - —
100-lb. dms ..... lb. .46 - —
small, dms. ..... lb. .48 - .54
imp., bgs ..... lb. .38 Nom.
Thioglycolic, refd., cbys., 100% basis lb. 1.35 - 1.55
Tobias, bbls., frt. alld ..... lb. .77 - —
Toluenesulfonic, dms., c.l., works, lb. .16 - —
l.c.l., works ..... lb. .17½- —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l. lb. .90 - —
125 lbs. to t.l ..... lb. 1.00 - —
p-Toluidine-m-sulfonic, bbls., works lb. .92 - 1.04
Trichloroacetic, bots. ..... lb. 2.50 - 2.50
Trichlorophenoxyacetic (see under 'T' 2,4,5T)
Tungstic, tech., kgs., works ... lb. 4.25 - —
Undecylenic, dms ..... lb. 1.40 - —
Aconite root, bls ..... lb. .50 - .55
Aconitine, cryst., potent, bots oz.78.00 - 85.00
Acrolein, tech., dms., c.l., works lb. .47 - —
l.c.l., works ..... lb. .47½- —
Acrylonitrile, dms., c.l., works lb. .33 - —
l.c.l., works ..... lb. .34 - —
tanks, works ..... lb. .21 - —
ACTH, cryst., bulk, 1,000 units/gram, bots. gram.15.00 - —
Adeps lanae (see Lanolin).
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb. 3.00 - 3.25
powdered, 30 mesh., fib., dms lb. 3.40 - 3.50
dl-Alanine, dms., works ..... lb. 8.50 - 11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms., t.c.l. ..... lb. .65 - .90
Egg, edible, flake, bbls ..... lb. 1.64 - 1.66
powd., bbls ..... lb. 1.68 - 1.70
tech., cryst., bbls ..... lb. .70 - .85
Alcohol, allyl, dms., c.l., dlvd ..... lb. .32 - —
l.c.l., dlvd ..... lb. .33 - —
tanks, dlvd ..... lb .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°132°C., dms., l.c.l., dlvd lb. .43 - —
ACS grade, dms., l.c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .17 - —
l.c.l., frt. alld ..... lb. .18 - —
tanks, frt. alld ..... lb. .15 - —
primary, dms., c.l., frt. alld. lb. .19¼- —
l.c.l., frt. alld ..... lb. .20¼- —
tanks, frt. alld ..... lb. .17¼- —
sec-synthetic, dms., c.l., frt. alld., works lb. .18 - —
l.c.l., works ..... lb. .19 - —
tanks, works ..... lb. .16 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
l.c.l., frt. alld. E ..... lb. .18 - —
tanks, frt. alld. E ..... lb. .15 - —
1-pentanol, (syn. normal), dms., c.l., works lb. .42 - —
l.c.l., works ..... lb. .43½- —
tanks, works ..... lb. .40 - —
2-pentanol, dms., c.l., works lb. .65 - —
l.c.l., works ..... lb. .70 - —
tanks, works ..... lb. .60 - —
Benzyl, NF, dms ..... lb. .64 - .79
tech., dms., dlvd ..... lb. .47½- .49
n-Butyl, ferment., dms., l.c., frt. alld. lb. .15 - —
l.c.l., frt. alld ..... lb. .16 - —
tanks, frt. alld ..... lb. .13 - —
n-synthetic, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd ..... lb. .16 - —
tanks, dlvd ..... lb. .13 - —
sec-synthetic, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd ..... lb. .14 - —
tanks, dlvd ..... lb. .11 - —
tert-synthetic, dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld ..... lb. .15 - —
tanks, works ..... lb. .12 - —
Capryl, 95%, dms., c.l., works. lb. .21½- —
l.c.l., works ..... lb. .22½- .23¼
tanks, works ..... lb. .19½- —
Cetyl, extra, ns., cns., 500-lb. tots or more lb. .73 - —
smaller lots ..... lb. .80 - 1.15
NF, fib., cns., 140-lb. lots or more lb. .58 - .82
smaller lots ..... lb. .59 - .82
Cinnamic, bots ..... lb. 2.15 - 2.75
Decyl, purif. bots. ..... lb. 1.75 - 2.00
mixed isomers, dms., c.l., dlvd. lb. .23 - —
l.c.l., dlvd. ..... lb. .24 - —
tanks, dlvd. ..... lb. .21 - —
normal (see 1-Decanol). lb. .23 - —
Denat., CD12, CD13, CD14, CD17, dms., c.l., dlvd. E. of Rockies gal. .54½- —
l.c.l., same basis. gal. .59½- .65¼
tanks, dlvd. same basis. gal. .41½- —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Unit.

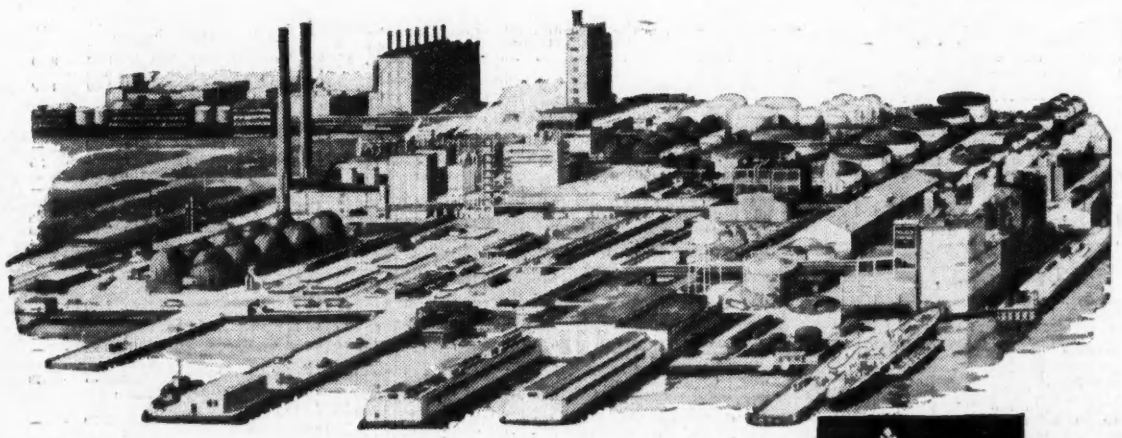
Proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis ..... gal. .61 - .67
tanks, same basis ..... gal. .43 - —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Unit.

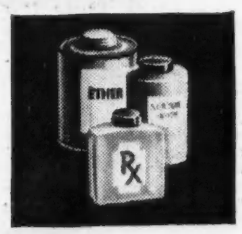
SD1, dms., c.l., dlvd. E. of Rockies gal. .55½- —
l.c.l., same basis ..... gal. .60½- .66¼
tanks, same basis ..... gal. .42½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .54 - —
l.c.l., same basis ..... gal. .59 - .65
tanks, same basis ..... gal. .41 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis ..... gal. .58 - .64
tanks, same basis ..... gal. .40 - —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .55½- —
l.c.l., same basis ..... gal. .60½- .66¼
tanks, same basis ..... gal. .42½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis ..... gal. .61 - .67
tanks, same basis ..... gal. .43 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .54½- —
l.c.l., same basis ..... gal. .59½- .65¼
tanks, same basis ..... gal. .41½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis ..... gal. .58 - .64
tanks, same basis ..... gal. .40 - —
SD35A, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis ..... gal. .61 - .67
tanks, same basis ..... gal. .43 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .54 - —
l.c.l., same basis ..... gal. .59 - .65
tanks, same basis ..... gal. .41 - —

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.

Diacetone, acetone-free, dms., c.l., dlvd. lb. .14 - —
l.c.l., dlvd ..... lb. .15 - —
tanks, dlvd ..... lb. .12 - —
tech., dms., c.l., dlvd ..... lb. .13½- —
l.c.l., dlvd ..... lb. .14½- —
tanks, dlvd ..... lb. .11½- —



Put This Plant Behind Your Product



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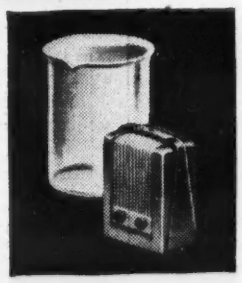
ETHYL ALCOHOL • BUTYL ALCOHOL, NORMAL
BUTYL ACETATE, NORMAL • ETHYL ACETATE
ACETALDEHYDE • ACETIC ACID GLACIAL
ACETONE C.P. • AMYL ACETATE
FUSEL OIL, REFINED • ISOAMYL ALCOHOL
PACO SOLVENT T.R. 590



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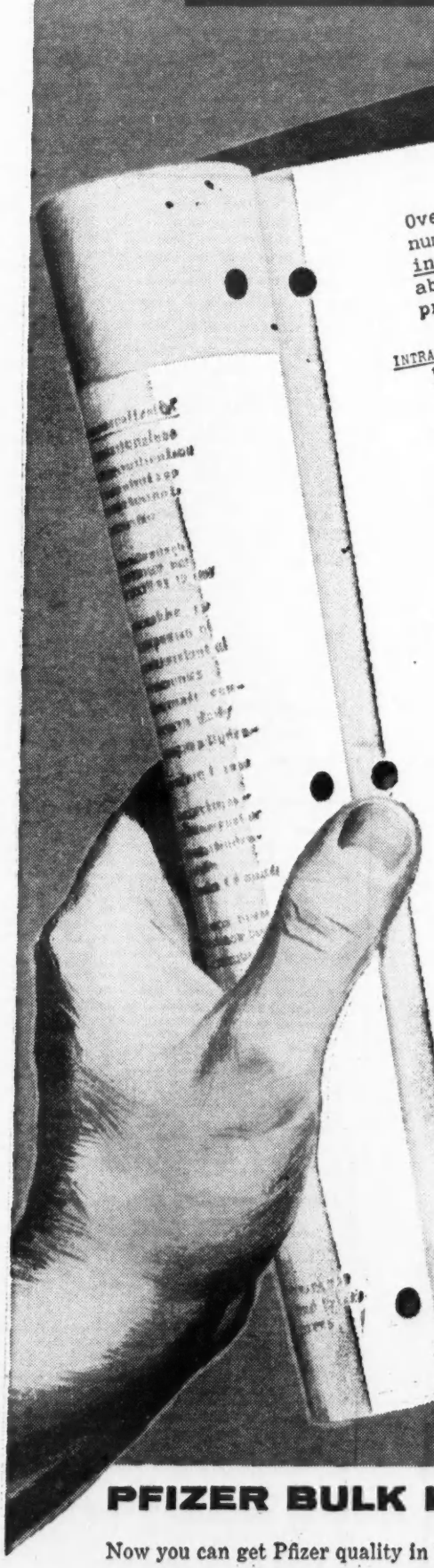
from the medical literature—a widening list of uses for hydrocortisone...

THE ANTI-INFLAMMATORY HORMONE



Over the past few years the medical journals have published numerous reports on the effectiveness of hydrocortisone in treating a wide range of diseases. Here are abstracts from some of these articles showing how the medical profession is putting this important steroid to use:

INTRA-ARTICULAR HYDROCORTISONE THERAPY was found to be of benefit in 75% of 171 patients with arthrosis, chronic polyarthritis or periarthritis humero-scapularis. Knipers reports "improved joint tap, with normalization of the cell, decreased viscosity as well as subjective improvement." Dosage: 5-10 injections of 25 mg. each. Some patients were held pain-free with regular injections every 3-4 weeks.

Knipers, R. K. W.: Fachr. Rheumaforsch. 13:97-101 April, 1954.

Sidi and Bourgeois-Gavardin found hydrocortisone "especially effective in diathesic and infantile eczema." They also obtained "rapid results" in acute eczema, and "good effects" in chronic types. Under study were 126 patients treated with topical applications of hydrocortisone solution (25 mg./cc.). Mild relapses which occurred in several instances were again treated with the hormone.

Sidi, E., and Bourgeois-Gavardin, Y.: Semaine d. hôp. Paris 30:1546-1549 April 14, 1954.

HYDROCORTISONE ALCOHOL RELIEVES NASAL ALLERGY – Intranasal hydrocortisone alcohol combined with two vasoconstrictors was found to offer "significant" objective benefit and "marked" subjective relief in the treatment of nasal allergies, according to Silcox. The author also found hydrocortisone alcohol "singularly effective" in the reduction of nasal polyps. Conclusion followed a study of 173 patients, ranging in age from eight to 60 years, with allergic rhinitis with or without polyps or acute rhinitis. The hormone solution was instilled by means of a plastic spray bottle, three squeezes of the spray (0.2 cc.) into each nostril four times daily. There was no evidence of tissue rebound or untoward systemic reactions.

Silcox, L. E.: Scientific Exhibit, American Medical Association, 103rd Annual Meeting, San Francisco, June 21-25, 1954.

OTITIS EXTERNA RESPONDS TO HYDROCORTISONE-ANTIBIOTIC DROPS – "Relatively quick subsidence of exudation, erythema, feeling of fullness and itching was noted" in 9 of 10 cases of otitis externa treated with a combined hydrocortisone-antibiotic suspension. Baer and Litt report that hydrocortisone-neomycin suspensions "are particularly suitable for use in ear canals." (The authors also found polymyxin B useful in this combined therapy.)

Baer, R.L. and Litt, J.Z.: J.A.M.A. 155:973 (July 10) 1954.

HYDROCORTISONE EFFECTIVE IN POLLINOSIS – In 13 patients with ragweed hay fever of 2 to 30 years' duration, hydrocortisone brought "definite relief," usually within 48 hours after administration, according to Traynor and his co-workers. Results were said to be "good" in 8 and "excellent" in 5 patients. Hydrocortisone was given orally for 2 to 26 days; suggested initial dosage, 80 mg. daily Essentially no untoward side reactions were noted. The authors conclude that hydrocortisone in pollinosis "...appears to be justified in certain carefully selected cases, and if given in the amount suggested, can be expected to produce benefit with a minimal risk of untoward reactions."

Traynor, M.V., Jr.; Henderson, L.L.; Prickman, L.E.; Koelsche, G.A.; Carryer, H.M.; and Peters, G.A.: Ann. Allergy 12:263 (May-June) 1954.

"HYDROCORTISONE OINTMENT IS A VALUABLE ADJUNCT in the treatment of atopic dermatitis, contact dermatitis, eczema of unknown etiology and anogenital pruritus or eczema," according to Oslo clinicians. Of 81 patients treated with 1% hydrocortisone ointment, 50 showed an "outstanding" result, 18 a good result.

Paulsen, E., and Loland, B.: Tidsschr.f.d.norske laegefor. 74:417 (June 15) 1954.

Reprinted from "IN BRIEF", Pfizer's bi-monthly review of current developments circulated to the pharmaceutical industry.

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Alcohol, ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies gal. 2.48 - —
i.e.l. same basis gal. 2.53 - 2.59
tanks, same basis gal. 2.35 - —
tax free, dms., c.l., dlvd E. of Rockies gal. .53 - —
i.e.l. same basis gal. .58 - .64
tanks, same basis gal. .40 - —
absolute, 200 pf., tax paid, dms., c.l., dlvd. E. of Rockies, gal. 2.58 - —
i.e.l. same basis gal. 2.63 - 2.69
tanks, same basis gal. 2.45 - —
2-Ethylbutyl, dms., c.l., works lb. .29½ - —
c.l. works lb. .30 - —
tanks, works lb. .28 - —
2-Ethylhexyl, dms., c.l., dlvd E lb. .23¾ - —
c.l. same basis lb. .24¾ - —
tanks, same basis lb. .21¾ - —
Furfuryl, cns., works lb. .29 - —
dms., c.l., Cedar Rapids, Ia lb. .21 - —
Newark, N. J. lb. .21½ - —
i.e.l., Cedar Rapids, Ia lb. .22 - —
Newark, N. J. lb. .22½ - —
tanks, Memphis, Tenn lb. .184 - —
Isoamyl, dms., c.l., works, frt. alld, E lb. .34 - —
i.e.l. same basis lb. .35 - —
tanks, same basis lb. .32 - —
Isobutyl, dms., c.l., dlvd lb. .14 - —
i.e.l. dlvd lb. .15 - —
tanks, dlvd lb. .12 - —
Iso-octyl, dms., c.l., dlvd. E lb. .23 - —
i.e.l. dlvd E lb. .24 - —
tanks, dlvd. E lb. .21 - —
dlvd gal. .48 - —
Isopropyl, refd., 91%, dms., c.l., i.e.l. dlvd gal. .55 - —
tanks, dlvd. gal. .35 - —
Alcohol, isopropyl, refd., 95%, c.l., dlvd. gal. .50 - —
i.e.l. dlvd gal. .57 - —
tanks, dlvd gal. .37 - —
99%, dms., c.l., dlvd gal. .52 - —
i.e.l., dlvd gal. .59 - —
tanks, dlvd gal. .39 - —
Lauryl, bots lb 2.00 - 2.50
Methyl (see Methanol).
Methylamyl (see Carbinol, methylisohutyl).
Octyl, perfumers grade, bots lb. 1.75 - 3.25
tech. (see Octanol, normal).
2-Phenylethyl, extra, dms lb. 1.14 - 1.45
standard, dms lb 1.26 - 1.35
n-Propyl, dms., c.l., dlvd lb. .12 - —
i.e.l. dlvd lb. .13 - —
tanks, dlvd lb. .10 - —
Tetrahydrofurfuryl, cns., Cedar Rapids, Iowa lb. .54 - —
dms., c.l., Niagara Falls, N. Y. lb. .44½ - —
i.e.l., Newark, N. J., Cedar Rapids, Ia lb. .47 - —
tanks, Niagara Falls, N. Y. lb. .43 - —
Indust grade dms., c.l., Niagara Falls, N. Y. lb. .305 - —
i.e.l., Newark, N. J., Cedar Rapids, Ia lb. .33 - —
tanks Niagara Falls, N. Y. lb. .29 - —
Tridecyl, mixed isomers, dms., dlvd lb. .26 - —
i.e.l., dlvd lb. .27 - —
tanks, dlvd lb. .24 - —
Wood (see Methanol).
Aldol, 95%, dms., works lb. .23 - —
denaturing grade, dms gal. 2.15 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .80 - —
i.e.l., dlvd lb. .85 - —
Aletris root, bgs lb. 1.75 - 1.85
Algin (see Sodium alginate).
Allethrin, 90%, dms., frt. alld lb. 28.80 - 28.90
soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½%, dms., frt. alld lb. .95 - 1.00
Allspice (see Pimento).
Allyl bromide, cbys., works lb. 1.35 - 1.40
Chloride, dms., c.l., dlvd lb. .17 - —
i.e.l., dlvd lb. .18 - —
tanks, dlvd lb. .15 - —
Starch, solid, dms., works lb. .52¾ - .54¾
solution, 40%, toluol-butanol, dms., works lb. .25½ - .26¼
Aloe, Cape, cs lb. .40 - —
powd., cs lb. .50 - —
Curacao, kgs lb. .50 - .55
Socotrine, kgs lb. No prices
Aloin, USP, bbls., dms., kgs lb. 3.75 - 3.82
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works 100 lbs. 5.05 - —
powd., dms., works 100 lbs. 5.20 - —
USP, burnt, dms lb. .20 - .21
hydrous, dms. lb. .07¾ - .08
Potassium, gran., bgs., works, 100 lbs. 4.55 - —
lump, dms., works 100 lbs. 5.30 - —
powd., dms., works 100 lbs. 5.45 - —
USP, burnt, dms lb. .20 - .21
hydrous, dms lb. .07¾ - .08
Potash-chrome, dms lb. .17 - —
Sodium, dms., c.l., works 100 lbs. 4.60 - —
i.e.l. works 100 lbs. 5.00 - —

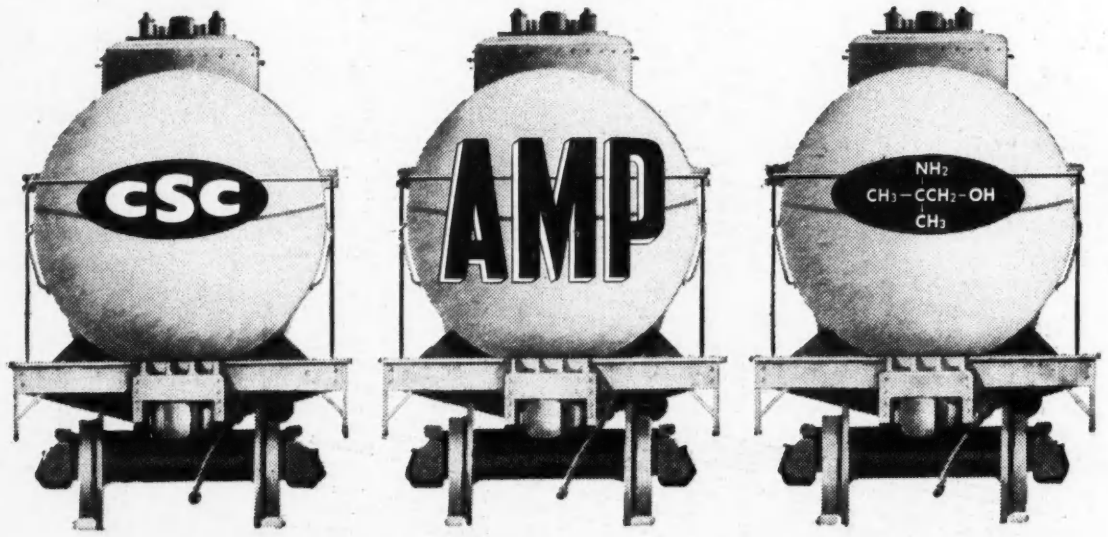
Alumina, calcined, bgs., c.l., works, lb. .0385 - —
i.e.l. works lb. .0410 - .0510
Aluminum acetate, basic soln., 24°, bbls., i.e.l., works lb. .14 - —
Chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .15 - —
i.e.l., works, frt. equald, lb. .1550 - —
cryst., dms., c.l., works lb. .1450 - —
i.e.l., works lb. .1500 - —
soln., 32°, cbys., c.l., works lb. .0445 - —
i.e.l., works lb. .0320 - .1295
tanks, works 100 lbs. 3.45 - —
NF, gran., dms., works lb. .29 - .30
Fluoride, tech., anhyd., bgs., c.l., works lb. .15¾ - —
i.e.l., works lb. .16¾ - .18¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Formate, basic soln., cbys lb. .09½ - —
i.e.l., works lb. .10 - —
Hydrate heavy bgs., c.l., frt. equald lb. .0285 - —
2,000-20,000 lb. lots, same basis lb. .041 - —
bulk, same basis lb. .026 - —
tech. bgs dlvd lb. 2¢ - —
Hydroxide, gel, pharmaceutical, 14-15%, Al_2O_3, fib. dms., works lb. .22 - —
contract, works lb. .21 - —
9-9½% Al_2O_3, fib. dms., works lb. .19 - —
contract, works lb. .18 - —
dried, USP, XIV, fib. dms., works lb. .82½ - —
contract, works lb. .79½ - —
tech., powder (see Aluminum hydrate).
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .232 - —
pigs, 10,000-lb. lots, frt. alld. lb. .215 - —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms lb. .63½ - —
standard, 200-lb. dms lb. .43 - —
Powder, lining, extra fine, dms. lb. 1.02½ - —
standard, 250-lb. dms lb. .72 - —

Aluminum powder and paste prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 25-lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Resinate, precip., 2.1% Al, dms., frt. alld lb. .30½ - —
Stearate, dibasic, ctns., c.l. lb. .33 - —
i.e.l. lb. .34 - .37
monobasic, ctns., c.l. lb. .33 - —
i.e.l. lb. .34 - .37
tribasic, ctns., c.l. lb. .33 - —
i.e.l. lb. .34 - .37
Sulfate, coml., bulk, c.l., works, 100 lbs. 1.85 - —
grd., bgs., c.l., works ton 37.00 - —
lump, bgs., c.l., works ton 40.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.55 - —
i.e.l., works, frt. equald. 100 lbs. 3.95 - —
USP, gran., dms., works lb. .16 - .18
powd., dms., works lb. .36 - .37
Trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots oz. 8.00 - 10.00
Aminoazotoluene, base, bbls., 100% basis lb. 1.03 - 1.18
o-Aminobiphenyl, dms., c.l., works lb. .32½ - —
i.e.l., works lb. .33 - —
tanks, works lb. .31 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .46½ - —
i.e.l. dlvd. lb. .45 - —
tanks, dlvd lb. .45 - —
2-Amino-2-methyl-1-propanol, cns., dms., i.e.l., works lb. .60 - —
m-Aminophenol, dist., dms., ton lots, lb. 2.05 - —
smaller lots lb. 2.50 - —
p-Aminophenol, dms., frt. alld lb. .97 - .98
Aminophylline, USP, 100-lb. dms lb. 3.55 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton 85.00 - 88.00
pure cyls., extra, zone 1 lb. .18½ - —
2 lb. .19 - —
3 lb. .19½ - .20
4 lb. .20 - —
5 lb. .21 - —
refrigeration, tanks, works, frt. equald. ton 87.50 - 90.50
aqueous (29.4% NH_3), dms., c.l., dlvd. Metropolitan area 100 lbs. 3.60 - —
i.e.l., works 100 lbs. 4.00 - —
tanks, works, anhyd. basis ton 96.00 - —
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
i.e.l., same basis 100 lbs. 8.65 - 11.15
white, gran. (see Ammonium chloride, tech.)
Ammoniacal liquor, tanks, works, anhyd. basis ton 96.00 - —
Ammonium acetate, purif., dms lb. .85 - —
Benzoate, USP, dms., kgs., 4,000-lb. lots, frt. alld lb. .80 - —
smaller lots, frt. alld lb. .81 - 1.08
Biborate, gran., dms., c.l., works, ton 317.00 - —
ton lots, ex whse. ton 390.50 - —
smaller lots, ex whse. ton 395.50 - —
Bicarbonate, dom., dms., c.l., works 100 lbs. 6.50 - —
i.e.l., works 100 lbs. 8.00 - —
imp., dms., i.e.l. lb. .07¼ - .08¼
Bichromate, dms., works lb. .42 - .43
Bifluoride, dms., dlvd lb. .2145 - .2245
Bromide, NF, gran., bbls lb. .39 - —
Powdered ammonium bromide 10c. per lb. higher.
Carbonate, USP, lump, dms lb. .16 - —
Chloride, tech., white, fines, gran., bgs., c.l., works 100 lbs. 5.25 - —
i.e.l., works 100 lbs. 7.00 - —
USP, gran., bbls., dms lb. .17¼ - —
Citrate, dibasic, bbls lb. .75 - —
dms. lb. .50 - .85
Dichromate (see Ammonium bichromate).
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia, aqueous).
Hypophosphite, NF, dms lb. 3.07 - —
Iodide, NF, dms., bots lb. 4.26 - 4.38
Linoleate, 80%, dms., works lb. .50 - .55
Nitrate, dom., fertilizer grade, 33.5% N., bgs., western, works, frt. equald ton 68.00 - 70.00
with dolomite, 20.5% N, bgs., Hopewell, Va ton 51.00 - —
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equal to $5 per ton 74.50 - —
western, bgs., c.l., f.o.b. cars, Los Angeles ton 84.89 - —
Oxalate, fine gran., dms lb. .26¼ - .31
Pentaborate, gran., dms., c.l., works ton 227.00 - —
ton lots, ex whse ton 300.50 - —
smaller lots, ex whse ton 305.50 - —

Ammonium pentaborate powder, $10 per ton higher.

MORE AND MORE, INDUSTRY CALLS FOR



2-AMINO-2-METHYL-1-PROPANOL

as a highly effective emulsifier and chemical intermediate

AMP — another of the versatile CSC Nitroparaffin derivatives, is considerably more efficient than many commonly used emulsifying agents. Less AMP is required to give equal emulsion performance.

AMP oleate is a powerful emulsifying agent for water-wax emulsions. Its effectiveness in lower concentrations than are required for comparable results with other widely used amine soaps makes AMP oleate an economical and desirable emulsifying agent. At relatively low concentrations of AMP oleate, the water-wax emulsions are stable and unchanged after repeated freeze-thaw cycles and heat stability tests. High gloss and excellent leveling are characteristic properties of AMP oleate floor wax emulsions when proper concentrations of AMP and oleic acid are used.

The higher fatty acid soaps of AMP are powerful emulsifying agents for use in such materials as cleaners, polishes, dressings, self-polishing floor waxes and emulsion-type paints. AMP's moderately high boiling point minimizes evaporation loss and objectionable fumes during manufacture of emulsions — without detracting from desirable water resistance and durability of film. With its advantage of low combining weight and its ability to emulsify a wide range of materials, AMP may solve your emulsifying problem.

AS A CHEMICAL INTERMEDIATE

Readily undergoes a wide variety of reactions. AMP forms substituted amides with esters, anhydrides and acyl halides. Also reacts with many other compounds including alkyl halides, aldehydes, ketones, and carbon disulfide. AMP can be used in the synthesis of efficient surface-active agents and detergents, and vulcanization accelerators for rubber.

Also suggested for synthesis of dyestuffs, photographic developers, and pharmaceuticals. Investigate the many ways in which AMP can help improve your products or processes.

PHYSICAL PROPERTIES		SPECIFICATIONS	
Molecular Weight	89.14	Neutral Equiv.	88.5-91.0
Boiling Point, °C	165 760mm	Color, APHA, max.	20
Melting Point, °C	30-31	Water, by wt., max.	0.8%
Specific Gravity at 20/20°C	0.934	Distill. Range	156°C - 177°C
		Below 161°C max.	10%
pH of 0.1M Aqueous Solution at 20°C	11.3	Below 168°C max.	5%
Solubility in Water at 20°C, g/100 ml	Completely Miscible	Odor	Characteristic
		Non-volatile matter by weight, max.	0.005%

OTHER AMINOHYDROXY COMPOUNDS

AB (2-Amino-1-butanol) $CH_3CH_2CHNH_2CH_2OH$

AMPD (2-Amino-2-methyl-1, 3-propanediol) $CH_2OHC(CH_3)NH_2CH_2OH$

AEPD (2-Amino-2-ethyl-1, 3-propanediol) $CH_2OHC(C_2H_5)NH_2CH_2OH$

TRIS AMINO (Tris[hydroxymethyl] aminomethane) $(CH_2OH)_3CNH_2$

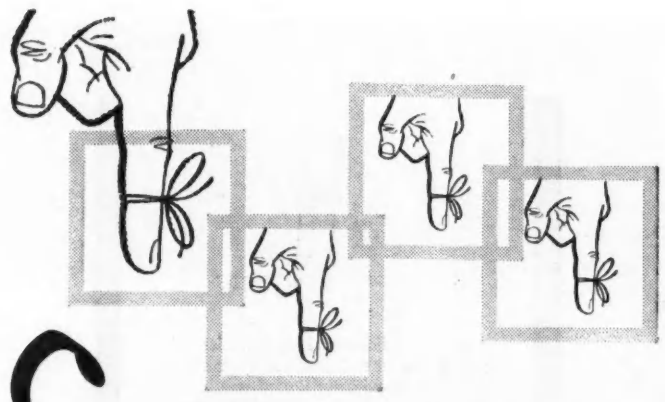
Write for samples and Technical Data Sheet No. 18.

COMMERCIAL SOLVENTS CORPORATION
260 MADISON AVENUE NEW YORK 16, N. Y.
CSC INDUSTRIAL CHEMICALS

Ammonium perchlorate, kgs., works	lb.	.50	.75
Persulfate, kgs.	lb.	.46½	.47½
Phosphate, coml., bgs., c.l., works, frt. equald	lb.	.0965	—
t.c.l., same basis	lb	.09	—
dibasic, NF, V bbls., dms.	lb.	.46	—
tech., bgs., c.l. works, frt. equald	lb.	.0865	—
t.c.l., same basis		.0915	—
Salicylate, NF, dms., kgs	lb.	1.62	1.64
Silicofluoride, dms., works	lb.	.11	.12
Sulfamate, bgs., c.l., t.l., works.	lb.	.18	—
t.c.l., works	lb.	.22	—
Sulfate, coke-oven, bulk, producing ovens	ton.	42.00	47.50
syn., bgs., c.l., western, works	ton.	44.00	—
bulk, works	ton	42.00	—
purif., dms., works	lb.	.09	.09½
Sulfide, liq., 40-44%, dms., c.l., frt. equald., 100% basis.	ton.	240.00	—
t.c.l., works, 100% basis.	ton.	300.00	—
tanks, frt. alld., 100% basis.	ton.	180.00	—
Sulfocyanide, tech. (see Ammonium thiocyanate).			
Thiocyanate, tech., dms., c.l., works	lb.	.20	—
t.c.l., works	lb.	.22	.26
Thioglycollate, coml., cbys., 100% basis	lb.	1.35	1.53
highly purif., cbys., 100% basis.	lb.	1.70	1.96
Thiosulfate, cryst., photo grade, fib dms., frt. alld	lb.	.65	—
60% soln., dms., c.l., works	lb.	.06½	—
d-Amphetamine hydrochloride dibasic, bots	lb.	28.00	—
dl, dms	lb	6.00	—
d-monobasic, bots	lb.	28.00	—
d-Phosphate, dibasic, bots	lb.	28.00	—
dl, dms	lb.	6.00	—
d-Sulfate, dms	lb	28.00	—
dl, dms	lb	6.00	—
Amyl acetate, ex fusel oil, tech., dms., c.l., frt. alld. E. of Rockies	lb.	.22	—
t.c.l., same basis	lb.	.23	—
tanks, same basis	lb.	.20	—
ex pentane, reg., dms., c.l., dlvd.	lb.	.17	—
t.c.l., same basis	lb.	.18	—
tanks, same basis	lb.	.15	—
tech., dms., c.l., dlvd.	lb.	.15	—
t.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
Alcohol (see Alcohol amyl).			
n-butyrate, dms.	lb.	.90	1.25
Cinnamic, aldehyde, dms	lb.	1.75	2.20
Nitrite, USP, bots	lb.	1.75	1.83
Salicylate, cns., dms	lb.	.74	1.05
o-tert-Amyl phenol, dms., c.l., works.	lb.	.43¾	—
t.c.l., works	lb.	.46¾	—
tanks, works	lb.	.41¾	—
p-tert-Amyl phenol, dms., c.l., works.	lb.	.24¾	—
t.c.l., works	lb.	.25¾	—
tanks, works	lb.	.23¾	—
Anethole, NF, cns., dms	lb.	1.85	—
tech., dms	lb.	1.10	—
Angelica root, dom., bls	lb.	.60	.70
Anise seed, Mexican, bgs	lb.	.33	—
Spanish, bgs.	lb.	.36	—
Syrian, bgs.	lb.	No prices.	
Aniline oil, dms., c.l., works, frt. arvd.	lb.	.21	—
t.c.l., works, frt. alld	lb.	.22	—
tanks, works, frt. alld	lb.	.20	—
Salt, dms., c.l., truckloads, 20,000 lbs., min., frt. alld	lb.	.31	—
t.c.l., same basis	lb.	.33	—
Anisic aldehyde, bots., dms	lb.	1.80	2.70
o-Anisidine, dms., works	lb.	.88	—
p-Anisidine, dms., works	lb.	.97	—
Annatto seed, whole, bgs.	lb.	.24	—
powd., dms.	lb.	.28	—
Anthracene, 90-95%, bbls., ton-lots, works	lb.	.70	—
smaller lots, works	lb.	.95	—
Anthraquinone, 99.5%, bbls, c.l., frt. alld	lb.	.83	—
t.c.l., same basis	lb.	.86	—
electrical grade, bbls., t.c.l., same basis	lb.	.91	—
Antimony butter (see Antimony trichloride).			
Metal, bulk, c.l., mines	lb.	.28½	—
cs., c.l., mines	lb.	.29	—
Oxide, bgs., c.l., frt. alld	lb.	.29	—
t.c.l., frt. alld	lb.	.30¼	—
Sulfide, approx. 60%, bgs., dlvd	lb.	.27	.30
Trichloride anhyd., pails, c.l., works	lb.	.38½	—
t.c.l., works	lb.	.40½	—
USP, powd., dms	lb.	.64	.65
Antimony-potassium tartrate, tech., powd., dms	lb.	.60½	.65¼
Antipyrine, NF, 200-lb. bbl	lb.	3.50	—
Apomorphine hydrochloride, USP, bots	oz.	23.40	23.90
Areca nuts, powd., bbls	lb.	.15	.16
Arecoline hydrobromide, NF, bots., tins	oz.	4.50	6.00
l-Arginine monohydrochloride, dms., 1-kilo lots	kilo.	74.80	83.00
Arnica flowers (true montana), bls.	lb.	3.00	Nom.
Arsenic metal, lump, bbls., ex whse.	lb.	.54	—
Trioxide, USP, dms	lb.	.48	—
White, powd., bbls., c.l., dlvd	lb.	.05½	—
t.c.l., dlvd	lb.	.06½	.07¼
Asafetida, cs	lb.	.36	.39
powd., bbls., dms	lb.	.50	.53
Asbestine (see Talc, fibrous, N. Y.)			
Asbestos, Canadian, crude, No. 1, c.l. (20 tons), mines	ton.	1,300.00	—
No. 2, c.l. (20 tons), mines	ton.	675.00	—
Run-of-mine, c.l., (20 tons), mines	ton.	556.00	—
3K, c.l. (20 tons), mines	ton.	436.00	—
3R, c.l. (20 tons), mines	ton.	371.00	—
3T, c.l. (20 tons), mines	ton.	348.00	—
3Z, c.l. (20 tons), mines	ton.	321.00	—
4K, c.l. (20 tons), mines	ton.	173.00	—
4M, c.l. (20 tons), mines	ton.	173.00	—
4T, c.l. (20 tons), mines	ton.	156.00	—
4Z, c.l. (20 tons), mines	ton.	156.00	—
5D, c.l. (20 tons), mines	ton.	122.50	—
5K, c.l. (20 tons), mines	ton.	122.50	—
5M, c.l. (20 tons), mines	ton.	116.50	—
5R, c.l. (20 tons), mines	ton.	110.00	—
6D, c.l. (30 tons), mines	ton.	78.00	—
7D, c.l. (30 tons), mines	ton.	68.50	—
7F, c.l., (30 tons), mines	ton.	65.00	—
7H, c.l. (30 tons), mines	ton.	55.00	—
7K, c.l. (30 tons), mines	ton.	46.00	—
7M, c.l., (30 tons), mines	ton.	40.00	—
7R, c.l. (30 tons), mines	ton.	39.00	—
7RF, c.l. (30 tons), mines	ton.	40.00	—
7T, c.l. (30 tons), mines	ton.	37.00	—
7TF, c.l. (30 tons), mines	ton.	40.00	—
8S, c.l., (30 tons), mines	ton.	27.00	—
Asbestos c.l. prices are in U. S. funds, t.c.l. lots, $4 per ton higher.			
Asphalt, gilsonite, black, jet, bgs., c.l., mines	ton.	37.00	—
select, 350° F., fusing pt., bgs., c.l., mines	ton.	38.00	—
270°-295°F., fusing pt., bgs., c.l., mines	ton.	37.00	—
seconds, 300° - 390°F. fusing pt., bgs., c.l., mines	ton.	32.00	—
Manjak, No. 10, crude, dms., works	lb.	.06¼	—
Asphalt, petroleum, cut-back, tanks, tankwagon, refy	gal.	.09	—
emulsion, tanks, tankwagon, refy	gal.	.09½	.10
steam-refd., 50-80 penetration, tanks, tankwagon, refy	ton.	21.00	—
85-300 penetration, tanks, tankwagon, refy	ton.	20.00	—
Aspirin (see Acid, acetylsalicylic).			
Atropine, USP, bots	oz.	6.25	6.75
Sulfate, USP, bots	oz.	4.00	4.20

B

Bacitracin, bulk, 1,000,000,000 or more units	50,000 units.	.70	—
less than 1,000,000,000 units	50,000 units.	.75	—
Balm of Gilead buds, dried, bgs	lb.	1.35	1.45
Barberry, root bark, bgs	lb.	.28	.30
Barbital, USP, 100-lb. dms	lb	4.50	—
Sodium, USP, dms	lb	4.75	4.77
Barium carbonate, precip., bgs., c.l., works	ton.	92.50	—
smaller lots, works	ton.	102.50	—
Chlorate, kgs., works	lb.	.32	.36
Chloride, anhyd., bgs., c.l., works.	ton.	158.00	—
t.c.l., works	ton.	168.00	—
NF, cryst., dms.	lb.	.20	—
tech., cryst., dms., c.l., works.	100 lbs.	6.00	—
t.c.l., works	100 lbs.	6.50	—
Chromate, bgs., frt. equald	lb.	.35	—
Dioxide (see Barium peroxide).			
Hydrate cryst., bgs	ton.	180.00	190.00
Monoxide (see Oxide).			
Nitrate, bbls., c.l., works	lb.	.12½	—
t.c.l., works	lb.	.14	—
Barium oxide, grd., dms., frt. equald.	ton.	255.00	—
t.c.l., works	ton.	265.00	—
Peroxide, dms., works	lb.	.16	—
Stearate, cns., c.l., frt. aud	lb.	.37	—
t.c.l., same basis	lb.	.38	.43
Sulfate, tech. (see Barytes and Blanc fixe).			
X-ray, dms.	lb.	.13	.15½
Sulfide, dms., c.l., works	ton.	85.00	—
t.c.l., works	ton.	95.00	—
Barytes, Southern, off-color, bgs., mines	ton.	25.00	—
95-75%, bgs., mines	ton.	25.00	—
water-grd., paper bgs., c.l., E. St. Louis	ton.	41.60	—
ex-whse., N. Y.	ton.	60.10	—
Bauxite, bulk, mines	ton.	9.50	10.00
Bay leaves (see Laurel leaves).			
Belladonna leaf, bls	lb.	.35	.37
root, bls	lb.	.45	.50
Bentonite, dom., 200 mesh, bgs., c.l., mines	ton.	14.00	—
imp. Italian, white, high gel., bgs., 5-ton lots, ex whse	ton.	80.60	—
1 ton-lots, ex whse	ton.	83.10	—
low gel., bgs., 5-ton lots, ex whse	ton.	78.95	—
1-ton lots, ex whse	ton.	81.45	—
Benzal chloride, cbys., works	lb.	.22	.23½
Benzaldehyde, NF, dms	lb.	.74	1.05
tech., cbys., dms	lb.	.44	—
Benzene (see Benzol).			
Hexachloride, 25% and 99% gamma isomer (see Lindane).			
tech., bgs., c.l., dlvd. gamma	unit-lb.	.007	—
t.c.l., works, gamma	unit-lb.	.0085	—
Benzene hexachloride, wet dust distributors, dms., c.l., dlvd., gamma	unit-lb.	.02	—
t.c.l., dlvd., gamma	unit-lb.	.021	—
Benzidine hydrochloride, bbls., frt. alld., 100% basis	lb.	1.00	—
Benzocaine, dms	lb.	3.48	3.50
Benzol, coaltar, pure or nitration, tanks, works:—			
Bethlehem, Pa.	gal.	.36	—
Birmingham district	gal.	.36	—
Chicago district	gal.	.36	—
Cleveland district	gal.	.36	—
Geneva, Utah	gal.	.36	—
Johnstown, Pa.	gal.	.36	—
Lackawanna, N. Y.	gal.	.36	—
Lone Star, Texas	gal.	.36	—
Lorain, Ohio	gal.	.36	—
Middletown, Ohio	gal.	.36	—
Minnequa, Colo	gal.	.36	—
Philadelphia district	gal.	.36	—
Pittsburgh district	gal.	.36	—
Sparrows Point, Md.	gal.	.36	—
Syracuse, N. Y.	gal.	.36	—
Terre Haute, Ind.	gal.	.36	—
Youngstown, Ohio	gal.	.36	—
Benzophenone, dms	lb.	1.40	1.75
Benzotrichloride, cbys., frt. equald.	lb.	.18	.20
Benzoyl chloride, cbys., dms., c.l., works, frt. equald	lb.	.22	—
t.c.l., same basis	lb.	.23	—
tank trucks, dlvd, Metropolitan area	lb.	.21	—
Peroxide, purif., fib, dms., 50 to 1,000-lb. lots, works	lb.	.98	1.08
Benzyl acetate, f.f.c., cns., dms	lb.	.62	1.04
Alcohol (see Alcohol, benzyl).			
Benzoate, U.S.P., f.f.c., cns., dms.	lb.	.62	1.10



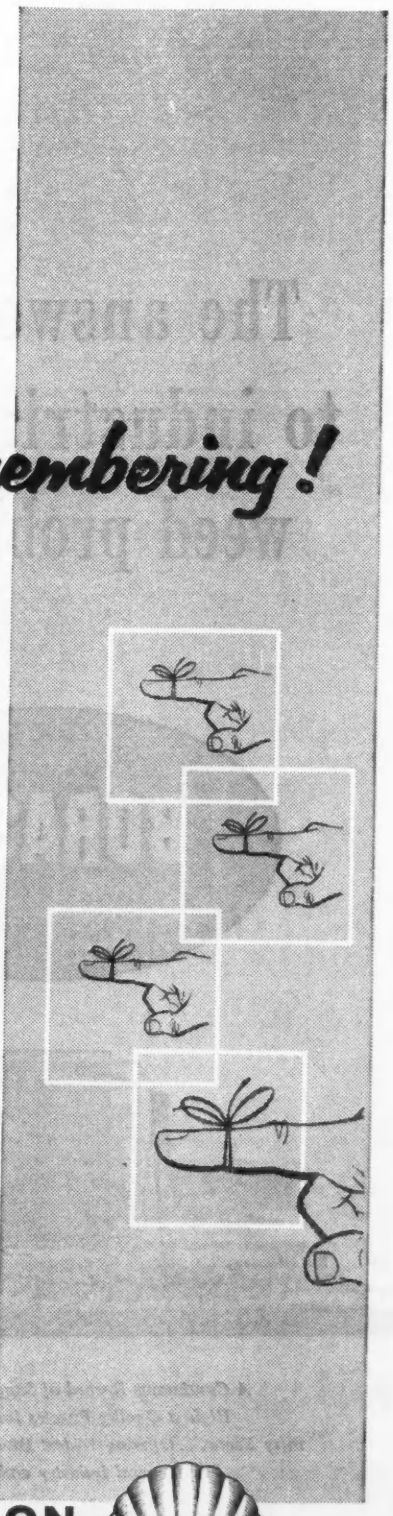
Something worth remembering!

Your dependable source of IPA is

SHELL CHEMICAL

When you order isopropyl alcohol from Shell Chemical, you gain in three important ways. You get guaranteed high-purity IPA, available in three grades, to meet your specifications. You get prompt delivery from strategically located bulk depots. And you can save money by taking advantage of bulk prices available through multi-product deliveries in compartment tank cars and trucks.

Write for technical literature and sales specifications.



SHELL CHEMICAL CORPORATION

CHEMICAL PARTNER OF INDUSTRY AND AGRICULTURE

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IN CANADA: Chemical Division, Shell Oil Company of Canada, Limited • Montreal • Toronto • Vancouver

Benzyl Chloride—Butyric Ether

Benzyl chloride, tech., 13-gal. cbys., dms., c.l., works, frt. equald ..... lb. .23 - —
l.c.l., same basis ..... lb. .24 - —
tank trucks, same basis .. lb. .21 - —

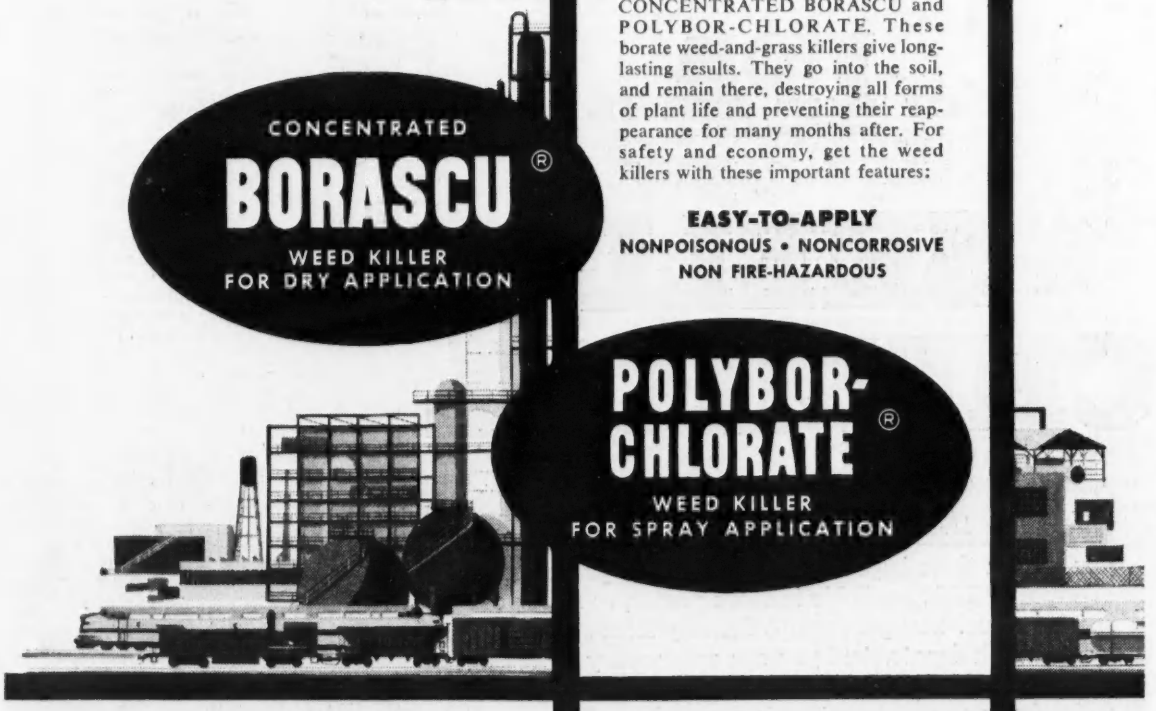
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices were ½c. lower.

Cinnamate, cns. ..... lb. 3.60 - 3.90
Formate cns. ..... lb. 1.30 - 2.10
Isoeugenol, cns. ..... lb. 8.60 - 9.10
Propionate, bots. ..... lb. 1.35 - 1.65
Salicylate, bots. ..... lb. 1.50 - 1.85
Benzylidine acetone, bots ..... lb. 1.68 - 1.80
Chloride (see Benzal chloride).
Berberine bisulfate, cns ..... lb.35.00 -36.25
Hydrochloride, bots. ..... lb.35.00 -36.25
Betagammapicoline (see b.g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, technical)
Biotin cryst., bots ..... gram.10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, jars ..... lb. 5.11 - —
Hydroxide, dms. ..... lb 4.65 - —
Metal, bxs., ton lots ..... lb 2.25 - —
Nitrate, cryst., dms ..... lb 2.10 2.17
Oxide, anhyd., dms ..... lb 4.47 5.05
Oxychloride, dms ..... lb 4.37 4.42
Phenolsulfonate, fib dms .... lb. 5.22 - —
Subcarbonate, USP, dms ..... lb. 3.20 - —
Bismuth subgallate, NF, fib., dms. lb. 3.15 - —
Subiodide, fib, dms. ..... lb. 5.37 - —
Subnitrate, NF, dms ..... lb. 2.65 - —
Subsalicylate, USP, dms ..... lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Black, acetylene, bgs., c.l., duty and freight extra lb. .17 - —
cs., l.c.l., ex whse. ..... lb. .22½- .26
Ash (see Barium sulfide).
Bone dms. l.c.l., frt. alld ... lb. .17 - .23½
Pacific coast bone black prices, 2c. per lb higher
Carbon, channel, pigment, high color, beads ctns., c.l., works. lb. .72 - —
l.c.l., dlvd. or whse. lb. .78 - —
medium color, uncompressed, bgs., c.l., works. lb. .12 - —
l.c.l., dlvd. or whse. lb. .19 - —
rubber, beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works ..... lb. .074 - —
l.c.l., works ..... lb. .1225- —
furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., l.c.l., whse lb. .10 - —
high abrasion, buis., c.l., works. lb. .0750- —
bgs., c.l., works ..... lb. .0790- —
l.c.l., dlvd or whse lb. .122 - .125
high modulus, bgs., c.l., works. lb. .0550- —
ctns., l.c.l., whse ..... lb. .0950- —
semi-reinforcing bgs., c.l., works lb. .045 - —
bgs., ctns., l.c.l., whse .... lb. .085 - —
Black, charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works. lb. .13¼- —
l.c.l., works ..... lb. .13½- —
Lamp, bgs., c.l., works ..... lb. .16 - .45
Mineral, bgs., works ..... lb. .0160- .0675
Blackberry root bark, bls ..... lb. .45 - —
Black haw root bark, bls ..... lb. .63 - .65
tree bark, bls ..... lb. .40 - .45
Blanc fixe, dry, byproduct, bgs., c.l., works ton.190.00 - —
l.c.l., works ..... ton.200.00 - —
direct process, bgs., c.l., works. ton.100.00 - —
l.c.l., works ..... ton.110.00 - —
N. Y. whse ..... ton.140.88 -165.00
Bleaching powder, dms., c.l., works. 100 lbs. 5.02 - —
l.c.l., works ..... 100 lbs. 6.52 - —
Blood, dried, 16-16½% ammonia, bgs. unit-ton. 5.50 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton. 5.25 - —
soluble, bgs., c.l. ..... lb. .14 - .17
l.c.l. ..... lb. .18 - .25
Bloodroot bls. ..... lb. .48 - .50
Blue, alkali, dry, 250-lb. bbls., dlvd. N. or Tenn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.10 - —
toner, 125-lb. bbls., litho flushed, same basis lb. 1.20 - —
Chinese, bbls., same basis ..... lb. .49 - —
Cobalt, genuine, bbls., same basis lb. 4.90 - —
imitation (see Blue ultramarine).
Dyes (see Dyes).
Blue, iron (see Blue, Chinese, Milori, Potash Prussian and Soda).
Methyl violet toner, molybdated, PMA, bbls., same basis lb. 2.60 - —
tungstated, PTMA, bbls., same basis .. lb. 4.00 - —
Milori, bbls., same basis ..... lb. .49 - —
Peacock, fugitive, 100% color strength, bbls., same basis. lb. .75 - —
Phthalocyanine, full strength, bbls., same basis lb. 3.45 - —
resinated, bbls., same basis lb. 3.00 - —
water dispersable, bbls., same basis lb. 1.54 - —
Potash, CP, bbls., same basis lb. .56 - —
Prussian, insoluble, bbls., same basis lb. .49 - —
soluble, bbls., same basis ... lb. .49 - —
Soda, CP, bronze, bbls., same basis lb. .56 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. .30½- .35
jobbing types, bbls., same basis. lb. .16½- .18½
regular types, dry, bbls., same basis lb. .22½- .35
Victoria toner, molybdated, PMA, bbls lb. 4.10 - —
tungstated, PTMA, bbls ... lb. 5.15 - —
Blue dry colors, dlvd. prices ½c higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Vitrol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E ton.72.50 - —
Los Angeles ton 82 00 - —
Bone phosphate defluorinated (see D)
of lime (see Calcium phosphate, tribasic).
precipatated (see Calcium phosphate tribasic, NF precip.).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton.78.00 - —
ton lots ex whse., N. Y. or Chicago ton.125.75 - —
bulk c.l. works ton 70 00 - —
cryst 99½%, bgs., c.l., works. ton.67.25 - —
ton lots, ex-whse., N. Y. or Chi ton.115 00 - —
smaller lots, same basis. ton 120 00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton.41.25 - —
ton lots, ex whse., N. Y., Chi ton.89 00 - —
smaller lots, same basis. ton.94.00 - —
bulk, c.l., works ton.35.75 - —
pentahydrate, 99½%, bgs., c.l., works ton.55.50 - —
ton lots, ex whse., N.Y., Chi ton.108.25 - —
smaller lots, same basis. ton.103.25 - —
powd., 99½% bgs. ..... ton.46.25 - —
ton lots, ex whse., N. Y. or Chi. ton.94 00 - —
smaller lots, same basis. ton.99.10 - —

Borax packed in kgs., $45.50 per ton higher than in paper bgs.; in barrels, $24.50 higher. USP borax $15 per ton higher.

Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt lb. .18 - .24
l.c.l., same basis ..... lb. .19 - .26
Borneol, cns ..... lb. 2.50 - 4.50
Borontrifluoride gas, cyls., truckload, works lb. .62 - —
lers truckload, works ..... lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
l.c.l., same basas lb. .33 - .38
ret. dms., c.l., t.l., same basis. lb. .30 - —
l.c.l. same basis ..... lb. .30 - .32
tanks, same basis ..... lb. .21½- —
Bromoform, pharmaceutical grade, bots lb 1.62 2.60
cbys ..... lb. 1.52 - —
Bromstyrol, bots ..... lb. 5.40 5.70
Bronze powder aluminum (See A).
Brown, iron oxide, pure, bgs., c.l., works lb. .14¼- —
l.c.l., works ..... lb. .14½- —
Oxide, metallic, bgs, works lb. .04 - —
Sienna, burnt, paper bgs., c.l., works lb. .04¼- 15¼
l.c.l., works lb. .04½- .15¼
raw, paper, bgs, c.l. works lb. .04½ .13
l.c.l. works lb. .04¾ .13¼
Umber, burnt, American, bgs., c.l., works lb. .06 - —
l.c.l., works ..... lb. .06¼ .07
Turkey type bgs. c.l. Boston, Bethlehem Easton Pa., Hiwassee, Va., N. Y lb. .06¾- —
l.c.l., works ..... lb. .07 - —
raw, American bgs. works lb. .06¼ .06¼
Turkey-type, bgs., works lb. .06¾ .07
Vandyke bbls. works lb. .09½- .12
Brucine, cns., 100-oz. lots ..... oz. .20 .25
Sulfate, NF, cns., 100-oz. lots oz. .15 - .20
Buchu leaves, bls ..... lb. .65 - —
Butadiene refd., cyls., refy ... lb. .22 - —
tanks, refy ..... lb. .15 - —
Butane, indust., tanks, group 3 gal. .02½- —
N. Y. harbor ..... gal. .08 - —
n-Butyl acetate, ferment., dms., c.l., frt. alld lb. .15 - —
l.c.l., same basis ..... lb. .16 - —
tanks, same basis ..... lb. .13 - —
syn., dms., c.l., dlvd. E ..... lb. .15 - —
l.c.l., same basis ..... lb. .16 - —
tanks, same basis ..... lb. .13 - —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .12½- —
l.c.l., same basis ..... lb. .13¼- —
tanks, same basis ..... lb. .10¾- —
n-Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde)
Chloride, dms., c.l., works ..... lb. .37½- —
l.c.l. works ..... lb. .38 - —
Ether, dms., c.l., works ..... lb. .31½- —
l.c.l., works ..... lb. .32 - —
tanks, works ..... lb. .30 - —
Lactate, dms., c.l., frt. alld. E. of Rockies lb. .35 - —
l.c.l., same basis ..... lb. .36 - —
tanks, same basis ..... lb. .33 - —
Laurate, dms., works ..... lb. .39 - —
Methacrylate, dms., l.t.l., works. lb. .70 - —
Oleate, refd., dms., l.c.l., works. lb. .32 - —
Phenylacetate dms lb. 6.50 - 6.60
Phthalate (see Dibutyl phthalate).
Stearate, dms., l.c.l., frt. equald lb. .24 - .27
Butylamine (see mono-di- and tri-).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .45 - —
l.c.l., works ..... lb. .50 - —
tanks, works ..... lb. .48 - —
p-tert-Butylphenol, bgs., c.l., works. lb. .25½- —
l.c.l., works ..... lb. .26½- —
Butyraldehyde, dms., c.l., dlvd lb. .21½- —
l.c.l. dlvd ..... lb. .22½- —
tanks, dlvd ..... lb. .19½- —
Butyric ether (see Ethyl butyrate).

The answer to industrial weed problems



When fence lines, parking facilities, rail sidings, driveways, and storage areas sprout forth with unwanted weeds and grasses—it's time for action! For, then, the danger of brush fires becomes a constant menace—the beauty of your premises suffers—and seedlings spread quickly. The answer, for safety and beauty, is bare ground! Where ground must be bare of vegetation... that's the place for a nonselective weed killer.

Maintenance men in the Railroad and the Petroleum industries have long favored using these two herbicides . . . CONCENTRATED BORASCU and POLYBOR-CHLORATE. These borate weed-and-grass killers give long-lasting results. They go into the soil, and remain there, destroying all forms of plant life and preventing their reappearance for many months after. For safety and economy, get the weed killers with these important features:

EASY-TO-APPLY
NONPOISONOUS • NONCORROSIVE
NON FIRE-HAZARDOUS

A Continuous Record of Supplying Highest Quality Borates for More Than Fifty Years . . . Offering Widest Diversification For General Industry and Agriculture.

MANUFACTURERS OF FAMOUS "20 MULE TEAM" PACKAGE PRODUCTS

AGRICULTURAL SALES DIVISION
PACIFIC COAST BORAX CO.
DIVISION OF BORAX CONSOLIDATED, LIMITED
630 SHATTO PLACE • LOS ANGELES 5, CALIFORNIA

C

Cacao butter (see Cocoa butter).
Cadmium iodide, 25-lb. fib. dms lb. 6.75 - 7.00
Metal ingots or sticks, cs., dlvd. lb. 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.35 - —
hydrous, dms., 100-lib. lots or more lb. 3.15 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.35 - —
hydrous, 100-lb. lots or more. lb. 3.15 - —
citrated, USP, dms., 100-lb. lots or more lb. 2.90 - —
Calamine, USP, dms lb. .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram. .60 - —
25 to 100 gram lots, works. gram. .65 - —
in edible oil (see Viosterol).
Calcium p-aminosalicylate, fib., dms., 1,000 lb. lots, frt. adjusted lb. 7.00 — —
smaller lots same basis lb 7.05 7.50
Arsenate, dealers, dms., c.l., whse. works, frt. alld. on 96 lbs. or over lb. .09 .10
t.c.l. same basis lb. .10 —
Bromide, NF, jars lb. .90 - .94
Carbide standard generator size, dms. c.l. dlvd ton 134 40 —
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton. 7.50 -10.00
chalk, whiting, 325 mesh, bgs. works ton 32 00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton 17 00 -18 00
precip. dense bgs. c.l. works ton 30.00 -33.00
t.c.l. works ton 40 00 -48 00
medium, bgs., c.l., works ton 35 00 —
t.c.l. works ton 45 00 -50 00
surface treated, bgs., c.l., works ton 35 00 -50.00
t.c.l. works ton 45 00 -65 00
ultrafine, bgs., c.l., works. ton 110.00 160 00
t.c.l. works ton 120 00 175 00
Chloride, cryst., purif., dms lb. .27 - —
flake, 77-80%, paper bgs., c.l., works, frt. equald ton.27 00 - —
liquor, 40%, tanks, frt. equald. ton.11.35 - —
pellets, bgs., c.l., works ton.33.00 - —
powd., bgs., c.l., works ton 37.65 - —
solid, 73-75%, dms., c.l., frt. equald ton.25.50 —
t.c.l., works, same basis. ton.34.00 -71.00
USP, gran., dms. lb. .32 - —
Chromate, bgs., frt. equald lb. .29½ - .30
Cyanide, dms., dlvd. E. of Rockies lb. .24 - .50
Cyclamate, fib. dms., 5,000 lbs. or more lb. 2.95 - —
2,500-5,000-lb. lots lb. 3.10 - —
1,000-2,500-lb. lots lb. 3.25 - —
Gluconate, AA, bbls., dms lb. 70 - 72
USP, bbls. dms lb. .33 - .65
Glycerophosphate, NF, fib. dms. lb 2.30 2.45
Hydride, dms., works lb. 2.15 3.00
Hypochlorite, high test, cased (45 lbs.), dlvd. E. of Rockies cs.22.60 -24.75
dms. 100-lb. same basis dm 28 65 -32 50
Hypophosphite, dms., ton lots or less lb. .90 - .93
Iodide, jars lb. 4.52 - —
Lactate, USP, dms., 10,000-lb. lots or more, works lb. .40 - —
smaller lots, works lb 41 48
Mandelate, USP, dms., works lb 2.10 2.25
Naphthenate, liq., 4% Ca, dms., frt. equald lb. .27¼ - —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton.46.00 - —
tech., dms., works lb. .13 - —
d-Pantothenate, jars, 100-gram lots or more, frt. adjusted, gram .07½ - —
Para-aminosalicylate (see Calcium p-Aminosalicylate).
Phenolsulfonate, dms lb. .70 - —
Phosphate dibasic, USP, bgs., c.l., frt. equald 100 lbs. 7.10 - —
t.c.l., frt. equald 100 lbs. 7.60 - 7.95
feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.79.55 - —
t.c.l., frt. equald ton.88 80 -89 55
20% P, bgs., c.l., t.l., frt. equald ton.84.55 - —
t.c.l., frt. equald ton.96.00 - —
21% P, bgs., c.l., t.l., frt. equald ton.90.30 - —
t.c.l., frt. equald ton.100.30 -100 80
monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 6.05 - —
smaller lots, same basis. 100 lbs. 6.55 - —
tribasic, precip., NF, bgs., c.l., frt. equald. 100 lbs. 7.60 - —
t.c.l., frt. equald. 100 lbs. 7.95 - —
Phytate, bgs., works lb. .57 - —
Resinate, precip., dms., frt. alld., works lb. .30½ - —
Silicate, hydrated, bgs., c.l., works. lb. .06 - —
t.c.l., works lb. 06½ - —
paint grade (see Wollastonite).
Stearate, ctns., c.l. lb. .35 - —
t.c.l. lb. .36 - .40
Sulfate (see Gypsum)
Calomel, USP, powd., dms lb. 3.42 - —
Camphene 46° m.p., dms., incl., c.l., works lb. .128 - —
t.c.l., same basis lb. .143 - —
tanks, same basis lb. .103 - —
Chlorinated 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb 3.00 - 3.13
nat. USP powd., cs., 100-lb. lots. lb. .60 - .65
tablets, 1-oz., ½-oz. cs lb. .75 - .80
syn., tech., 1 bbl. or more lb. .52 - —
USP, gran., powd., bbls. 2,000-lb. lots lb. .59 - —
1,000-lb. lots lb. .60 - —
smaller lots lb. .61 - —
tablets, tins, 2,000-lb. lots lb. .90 - —
1,000-lb. lots lb. .91 - —
smaller lots lb. .92 - —
Canada balsam (see Fir balsam).
Cantharides, Chinese, cs lb. 2.00 - 2.05
powd., bxs lb. 2.25 - 2.30
Russian, bgs lb. 4.00 - 4.05
powd., bxs lb. 4.35 - 4.40
Capsicum (see Pepper red).
Oleoresin, NF, from domestic pepper, dms lb. 4.50 - 5.25
from African pepper, dms lb. 4.35 - 5.00
Caraway seed, Dutch, bag lb. .17½ - .18
Carbazole, 97%, bbls., ton lots, works lb. 1.03 - —
Carbinol, methyl isobutyl (see Methyl isobutyl carbinol).
Carbon dioxide, indust., wholesale, bulk, dlvd. metropolitan area. ton.73.00 -115.00
cyls., same basis lb. .08 - —
solid, same basis lb. .035 - .040
Disulfide, 55-gal. dms., c.l., works, frt. alld. to competitive points lb. .07 - —
t.c.l., same basis lb. .08½ - .09
5-gal. 30 dms. to c.l. same basis. lb. .13 - —
less than 30 dms lb. .16 - —
tanks, same basis lb. .0515 - —
Carbon tetrochloride CP, dms., t.c.l., frt. alld lb. .10½ - .13¼
tech., consumers, dms., c.l. E. Rockies, frt. alld lb. .10 - .10½
W. of Rockies, f.o.b. stockpoints lb. .10½ - .11
t.c.l., E. of Rockies, frt. alld lb. .11¾ - .12¼
W. of Rockies, f.o.b. stockpoints lb. .12¼ - .12¾
tanks, E. of Rockies, frt. alld lb. .08½ - .09
W. of Rockies, f.o.b. stockpoints lb. .09 - .09½
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms, 100-lb lots, works lb 4.00 - 4.25
smaller lots, works lb 4.10 4.75
Cardamom fruit, fancy, bold, cs lb 3.95 - —
AA, cs. lb 3.60 - —
decorticated, Ceylon, cs lb. 1.95 - —
Guatemalan, cs. lb. 2.10 - —
green, Alleppey, bgs. lb. 1.70 - —
Ceylon, bgs. lb. 1.70 - —
seed (see Cardamom fruit decorticated).
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd lb.14.40 - —
smaller lots, dlvd lb.14.50 -15 20
Carotene, tech., 1,350,000 A units per gram, tins, works gram. .48 - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units .18 - —
microcrystalline in oil, 400,000 A units per gram, tins, works million units. .30 - —
beta, pure, crystalline, 1,600,000 A units to 1,670,000 per gram, cns gram. .40 - —
in vegetable oil, 400,000 A units per gram, cns. gram. .096 - —
Carvol, bots. lb 4.75 9 65
Cascara sagrada bark, bulk lb. .30 - .31
Casein dom., acid precip., standard, bgs., 10,000-lb lots or more, shipt. point lb. .27 - .30
premium, bgs., 10,000-lb. lots or more, shipt point lb. .35 - .40
imp., Argentine, acid-precip., grd., 100-lb. lots or more, duty paid lb. .22½ - .23¼
Cashewnut shell liquid, treated dms., c.l., Newark, N J lb. .22 - —
ton lots, same basis lb. .23 - —
dm lots same basis lb. .25 - —
Cassia, Batavia, cuttings, bls lb. .16 - —
longstick, cracked, bls lb. .17½ - —
shortstick, cracked, bls lb. .16½ - —
Saigon, broken, bls lb. No prices.
medium, reconditioned, bls lb. No prices.
thin, bls lb. No prices.
Castor beans, bgs., c. & f ton.110.00 Nom.
Oil (see Oil, castor)
Pomace, bgs., c.l., works ton. No stocks.
Castoreum, nat., cns lb 5.00 -30.00
syn., cns lb. 9.00 - —
Catechol, CP, cryst., fib. dms., works lb. 2.17½ - —
resub., dms., works lb. 4.29½ - —
Catnip leaves, Southern, bls lb. .75 - —
Celery seed, French, bgs., shipt lb. .40 - —
Indian, bgs. lb. .17½ - —
Cellulose scrap (see Pyroxylin scrap).
Acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd. E lb. .35 - .46
Acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E. lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
Cellulose, acetate-butyrate, powd., dlvd E lb. .585 - .595
half-second, bgs., dlvd. E. lb. .545 - .555
Cerium hydrate, 74% CeO_2, fib. dms., 100-lb. lots or more lb. 1.44 - —
77% CeO_2, fib. dms., 100-lb. lots or more lb. 1.74 - —
Oxalate, NF, bbls., bgs., works lb. 1.32 - —
Oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb. 1.85 - 1.93
smaller lots, dlvd lb. 2.03 - 2.23
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, cs lb. 85 - —
Roman, cs lb. 1.50 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
5-ton lots, works lb. .26½ - .32¼
smaller lots works lb. .27 - .50
Bone (see Black, bone).
Hardwood, briquets, bgs., c.l., works ton 77.00 -88 00
gran., bgs., works ton 77.00 - —
bulk c.l., works ton 70.40 - —
Pinewood gran., powd., bgs., c.l., works, South ton.55.00 - —
t.c.l., works, South ton.55.00 -65 00
lump bgs., c.l., works, South ton.51.50 —
t.c.l., works, South ton.54.50 -69 00
bulk, c.l., works, South ton.36.00 - —
Chestnut extract, liq., 25% tannin, bbls., c.l., works lb. .04¾ - —
t.c.l., works lb. .0510 - —
tanks, works lb. .04 - —
powd., 60% tannin, bgs., extra, c.l., works lb. .1032 - —
t.c.l., works lb. .1102 - —

Made with the skill that assures protection

This superbly carved and inlaid shield is a product of skillful 16th Century armor-making. Its dimensions and balance permit easy handling. The intricate carving and embossment reveal it as a masterpiece of sculpture. And most important of all, the sturdy construction and careful design gave maximum protection to the warrior who carried it in battle.

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405 LEXINGTON AVE.
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Chloral—Creosote, Wood

Chloral, tech., 94% min., dms., c.l. works lb. .23 - —
l.c.l., works lb. .24 - —
tanks, works lb. .21 - —
Hydrate, USP, 40-lb. jars, 1,000-lb. lots lb. 1.00 - —
500-lb. lots lb. 1.03 - —
100-lb. lots or less lb. 1.05 - —
Chloramine T, NF, bbls., works lb. .75 - 1.00
Chlordan, agricultural, dms., c.l., frt alld lb. .65 - —
l.c.l., 5,000 to 10,000-lb. lots, frt alld lb. .66 - —
clarif., dms., c.l., frt. alld lb. .75 - —
l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .76 - —
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .15½- —
l.c.l., same basis lb. .16½- —
70%, dms., c.l., same basis lb. .18 - —
l.c.l., same basis lb. .19 - —
Rubber, 5, 10, 20 cps., ctns., c.l., works lb. .55 - —
l.c.l., works lb. .56 - —
125, 1,000 cps., ctns., c.l., works lb. .65 - —
l.c.l., works lb. .66 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .09½- —
l.c.l., Metropolitan area lb. .11 - .12¼
tanks, single units, works, frt. equald 100 lbs. 2.93 - —
multiple units, 5 cars, works, frt. equald 100 lbs. 3.80 - 3.83
3 cars, same basis 100 lbs. 3.80 - —
2 cars, same basis 100 lbs. 5.00 - —
1 car, same basis 100 lbs. 6.00 - —

4-Chloro-2-aminotoluene, fused, bbls. lb. 1.45 - —
m-Chloroaniline, dms., c.l., frt. equald lb. .75 - —
l.c.l., same basis lb. .80 - —
o-Chloroaniline, dms., c.l., works, frt. equald lb. .70 - —
l.c.l., same basis lb. .72 - —
p-Chloroaniline, dms., c.l., works, frt. equald lb. .75 - —
o-Chlorobenzaldehyde, dms., works. lb. 1.20 - —
p-Chlorobenzaldehyde, dms., works. lb. 1.33 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
powd., dlvd. E., 100% basis lb. .86 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80 - —
o-Chlorophenol, dms. c.l. frt. equald. lb. .34½- —
l.c.l., same basis lb. .35½- —
p-Chlorophenol, dms. c.l. frt. equald. lb. .34½- —
l.c.l., same basis lb. .35½- —
Chlorophyll, oil soluble, not fixed, 4%, pails, tins, works lb. 4.25 - —
copper fixed, 6½% tins, pails, works lb 4.25 - —
Sodium-copper, aqueous soln., 4%, dms., pails, works lb. 3.75 - —
6%, pails, dms., works lb. 4.00 - 4.80
14%, dms., works lb. 8.90 - —

Chlorophyll, sodium-copper, conc., dom., 30%, dms., works, 100% basis lb. 42.00 - —
75%, dms., works, 100% basis lb. 45.00 - —
90%-100%, dms., works, 100% basis lb. 45.00 - —
imp., 60%, tins, 100% basis. lb. 58.00 - —
75%, tins, 100% basis lb. 58.00 - —
90%, tins, 100% basis lb. 58.00 - —
Chloropicrin, comi., bots lb. 1.50 - —
cyls., 180 lbs. frt alld lb. .95 - —
100 lbs., same basis lb. .97 - —
25 lbs., same basis lb. 1.22 - —
Cholesterol, USP, fib. dms., 100-lb. lots lb. 6.85 - 9.00
Choline bitartrate, fib. dms., frt. adjusted lb. 1.25 - 1.50
Chloride, fib. dms., frt. adjusted. lb. 1.50 - 1.75
Dihydrogen citrate, fib. dms., frt. adjusted lb. 1.50 - 1.75
Chromium acetate, soln., 7½%, bbls., works lb. .08½- —
cbys works lb. .10¼ —
Fluoride, bbls., works lb. .51 - .52
Green (see Green, chrome).
Oxide (see Green chromium oxide).
Trioxide, NF, bots lb. .82 - .89
Yellow (see Yellow chrome).
Cinchona bark, NF, red, broken, bgs. lb. .35 - .40
yellow, broken, bgs. lb. .35 - .40
Cinchonidine, cryst., cns., 100-oz. lots. oz. .65 - —
Sulfate, cns., 100-oz. lots oz. .35 - —
Cinchonine, cryst., cns., 100-oz. lots. oz. .52 - .57
Sulfate, NF, cns., 100-oz. lots oz. .27½- .30½
Cinchophen, NF, heavy density, dms., frt. adjusted lb. 3.70 - 4.05
standard density, dms., same basis lb. 3.50 - 3.85

Cinchophen-sodium, dms., frt. adjusted lb. 4.50 - 4.85
Cinnamic alcohol (see Alcohol cinnamic).
Aldehyde, cns., dms. lb. 1.00 - 1.30
Cinnamon, Ceylon, No. 2 lb. .58 - —
"0000," bgs. lb. .79 - —
Citral, bots., cns. lb. 7.05 - —
Citronellal, bots., dms. lb 1.85 - 2.50
Citronellol, bots., dms. lb. 4.40 - 5.00
Civet, artif., bots. lb. 13.75 -15.00
nat., bots oz. 7.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn. ton. 19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton. 10.00 - —
purif., bgs., c.l. Tenn ton. 20.50 - —
imp., airfloated, bgs., c.l., Atl. port long ton. 42.00 -45.00
lump, bulk, Atl. port long ton. 27.00 -30.20
China, dom., dry-grd., airfloat, 99%, 325 mesh, bgs., c.l., Georgia, works ton. 10.00 - —
l.c.l., Georgia, works. ton. 15.50 - —
300 mesh, bgs., c.l., Georgia, works ton. 13.50 -14.50
l.c.l. ton. 35.00 -36.00
imp., white, lump, bulk, c.l., ex dock, Phila., Portland, Me. gross ton. 20.00 -35.00
powd., bgs., c.l., ex dock net ton 50.00 —
l.c.l., ex whse net ton. 60.00 -65.00
Clove, Madagascar, bgs. lb. .48 - —
Zanzibar, bls. lb. .48 - —
CMC, crude, 96%, low or medium vis., bgs., or fib. dms., 23,000 lbs., dlvd. E., 100% basis. lb. .37 - —
less than 23,000 lbs., dlvd. E., 100% basis lb. .41 - —
65%, bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .37 - —
l.c.l., dlvd. E., 100% basis. lb. .41 - —
purif., high vis. (see Gum Cellulose).
standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld lb. .55 - —
smaller lots, same basis lb. .57 - —
CMC prices W. of the Rockies are 2c. per lb. lower, and are on a works basis.
Coaltar, crude, resale dms., c.l., ex-whse gal. .255 - —
l.c.l., ex-whse gal. .275 - —
tanks, ex works gal. .155 - .159
refd., resale, dms., c.l., ex-whse. gal. .2650- .32
l.c.l., ex-whse gal. .2850- .34
tanks, ex-whse gal. .1650- .1760
Cobalt acetate, 23.7%, bbls., dlvd. lb. 1.30 - —
Carbonate, 46%, powd., bgs., dlvd. lb. 2.15 - —
Chloride, 24.2% Co., kgs., dlvd., lb. 1.20 - —
Hydrate, 60-61% Co, bbls., dlvd. lb. 2.72 - —
Linoleate, fused, 8½% Co., dms. lb. .75¾- —
liq., 6% Co., dms lb. .61 - —
Metal, 97-99% kgs., ex whse lb. 2.60 - —
Naphthenate, liq., 6% Co., dms., dlvd lb. .48¼- —
Nitrate, 20.1% Co, bbls., dlvd lb. 1.00 - —
Oxide, black, 72½-73½% Co., kgs. lb. 1.96 - —
70-71% Co., kgs lb. 1.90 - —
Phosphate, powd., 32.1% Co., kgs., dlvd lb. 1.69 - —
Resinate, fused, 3% Co., dms lb. .29¾- —
Sulfate, cryst. 21% Co., dms., dlvd lb. .89 - —
monohydrated, 33% Co., dms. dlvd lb. 1.40 - —
Tallate, 6% Co., dms., dlvd lb. .43¾- —
Cocaine, USP, cns., 100-oz. lots oz. 17.80 - —
Hydrochloride, cns., 100-oz. lots. oz. 13.75 - —
Cocillana bark, bgs lb. .40 - .50
Cocoa butter, bgs. lb. .58 - .64
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Hydrochloride, cns., 100-oz. lots. oz. 11.75 - —
Phosphate, USP, cns., 100-oz. lots. oz. 10.25 - —
Sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls. lb. .20 - .22
blue, bls lb. .20 - .22
Colchicine, USP, bots., cns. oz. 33.50 -40.00
Colchicum root, bls lb. .45 - .55
seed, bgs lb. .80 - 1.10
Collodion, USP, dms lb. .32½- —
flexible, USP, dms lb. .34 - —
Colocynth, pulp, bls lb. .25 - .30
Colombo root, bls lb. No prices.
Condurango bark, bales lb. .40 - .50
Copaiba balsam, cns., dms lb. .90 - 1.20
Copper acetate, bbls., c.l., works lb. .43 - —
l.c.l., works lb. .44 - —
Carbonate, 55%, bgs., works lb. .30 - .31¼
Chloride, anhyd., bbls., works lb. .43½- —
cryst., bbls., works lb. .29 - .29¼
Cyanide, tech., bbls., 20,000-lb. lots or more lb. .707 - —
1,000-lb. lots or more lb. .717 - —
smaller lots lb. .737 - —
Gluconate, cns., dms lb. 3.00 - 3.24
Hydrate, dms., frt. alld. E. Miss. lb. .45¼- .45¾
Metal, electrolytic, dlvd., Valley basis lb. .36 - —
Naphthenate, liq., 8% Cu., dms., frt. alld lb. .24 - —
Nitrate, tech., cryst., bbls., works. lb. .33¼- —
Oleate, solid, 8% Cu, dms., works lb. .45 - —
Oxide, black, bbls., 500-lb. lots or more, works lb. .47 - .49¼
red, 97%, USN Type I, bbls., lb. .83½- .88
90%, USN Type II, bbls., 500-lb. lots or more, works lb. .48½- .51½
Oxychloride, dms., works lb. .48 - .56½
Quinolinate, fib. dms lb. 4.25 - 4.50
Resinate, precip., dms., frt. alld lb. .31½- —
Sulfate, CP, gran., bbls., works lb. .1915- —
cryst., 99%, bgs., c.l., works. 100 lbs. 12.25 - —
l.c.l., works 100 lbs. 12.75 -13.25
monohydrated, 35% dms., c.l., works 100 lbs. 19.75 - —
l.c.l., works 100 lbs. 20.50 - —
tribasic, dealers, bgs., c.l., works, frt. alld 100 lbs. 26.25 - —
l.c.l., works 100 lbs. 27.25 -28.25
Undecylenate, dms lb. 2.90 - 3.00
Copperas (see Ferrous sulfate).
Copra, Atl. Gulf ports, c.i.f. ton. 157.00 - —
Pacific ports, c.i.f. lb. 152.00 - —
Coriander seed, Moroccan, bgs. lb. .15 - —
Roumanian, bgs. lb. .06½- —
Yugoslavian, bgs. lb. .06 - —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.31 - —
l.c.l. 100 lbs. 7.46 - —
Syrup, 42° dms., c.l. 100 lbs. 7.32 - —
l.c.l. 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric Chloride).
Cortisone acetate, NNR, bulk gram. 3.50 - 3.55
Cottonseed meal, exp. 41%, bgs., Memphis ton. 61.00 - —
Coumarin, cryst., NF, dms lb. 3.10 - 3.20
Cramp bark, NF, bls lb. .85 - .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots. cbys. lb. 3.08 - 3.26
Coaltar, crude, tanks, works, frt. adjusted gal. .22 - —
soln., 80%, tanks, works gal. .2068- —
refd., dms., c.l., works gal. .40 - .42
l.c.l., same basis gal. .50 - .53
tanks, same basis gal. .30 - .33
Wood, beechwood, cbys., dms lb. 1.60 - 1.65
hardwood, NF, bots., cbys lb. 1.30 - 1.35
pinewood, tanks, works lb. .427 - .438

D. D. V. P.

(Dimethyl dichloro vinyl phosphate)

The new organic insecticide developed by the U. S. Public Health Service.

Available to properly-qualified organizations for experimental use only.

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NEWARK, NEW JERSEY

Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms. c.l. frt equald lb. .133 - —
l.c.l. same basis lb. .136 - —
tanks, same basis lb. .12 - —
USP, non-ret., dms., c.l., same basis lb. .143 - —
l.c.l., same basis lb. .146 - —
ret dms., c.l. same basis lb. .140 - —
l.c.l. same basis lb. .145 - —
tanks, same basis lb. .130 - —
m-Cresol, 95-98%, dms., c.l., works. lb. .60 - —
l.c.l. works lb. .61 - —
o-Cresol, m.p. over 30°C., ret. dms., c.l., frt. equald lb. .173 - —
l.c.l. same basis lb. .176 - —
tanks, same basis lb. .16 - —
29°C. ret dms. c.l. frt. equald. lb. .16 - —
l.c.l. same basis lb. .16½ - —
tanks, same basis lb. .15 - —
25-29°C., dms., c.l., frt. equald. lb. .155 - —
l.c.l. same basis lb. .156 - —
tanks, same basis lb. .14 - —
p-Cresol, 98% dms. c.l., dlvd lb. .49 - —
l.c.l. dlvd lb. .51 - —
Methyl ether cns lb. 1.90 - 2.50
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼ - .25
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
l.c.l., works 100 lbs. 14.25 - —
insecticide, dealers, bgs., c.l., dlvd 100 lbs. 16.75 - —
l.c.l., dlvd 100 lbs. 17.75 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .26 - —
l.c.l., works lb. .27 - .27½
Cubeb berries, XX, NF, bgs. lb. .60 - .65
powd., es lb. .75 - .80
Cumene, dms., c.l., works lb. .12 - —
l.c.l. works lb. .14 - —
tanks works lb. .11 - —
Cumin seed, Iranian, bgs. lb. .13 - —
Turkish, bgs. lb. .13 - —
Cutch extract, 50% tannin, bgs., ex dock duty extra lb. .08½ - —
Cyanamide, fertilizer mixing grades, 20.6% N, gran., bgs., Niagara Falls, Ont., contract ton 55.00 - —
pulv., 21% N, bgs., works, unit-ton 2.75 - —
indust. grade, bgs., c.l., works ton 75.00 - —
l.c.l., bgs., works ton 90.00 - —
6-16 mesh, dms. c.l., works ton 120.00 - —
l.c.l. dms., works ton 140.00 - —
Cyclohexane, 99%, tech., dms., c.l., works gal. .70 - —
l.c.l., works gal. .72 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28½ - .37¼
l.c.l. works, same basis lb. .30 - .38¼
tanks works, same basis lb. .27 - .36¼
Cyclohexanone, tech., dms., c.l., works lb. .33½ - —
l.c.l., works lb. .35 - —
tanks works lb. .32 - —
Cyclohexylamine, dms., c.l., works. lb. .46½ - —
l.c.l., works lb. .47½ - —
tanks, works lb. .45 - —
Cyclopropane, CP, 2-lb. cyls., works. cyl. 48.00 - —
6 oz. cyls., works cyl. 12.00 - —
USP, hospitals, cyls., 40-gal. lots. gal. .38 - —
100-gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

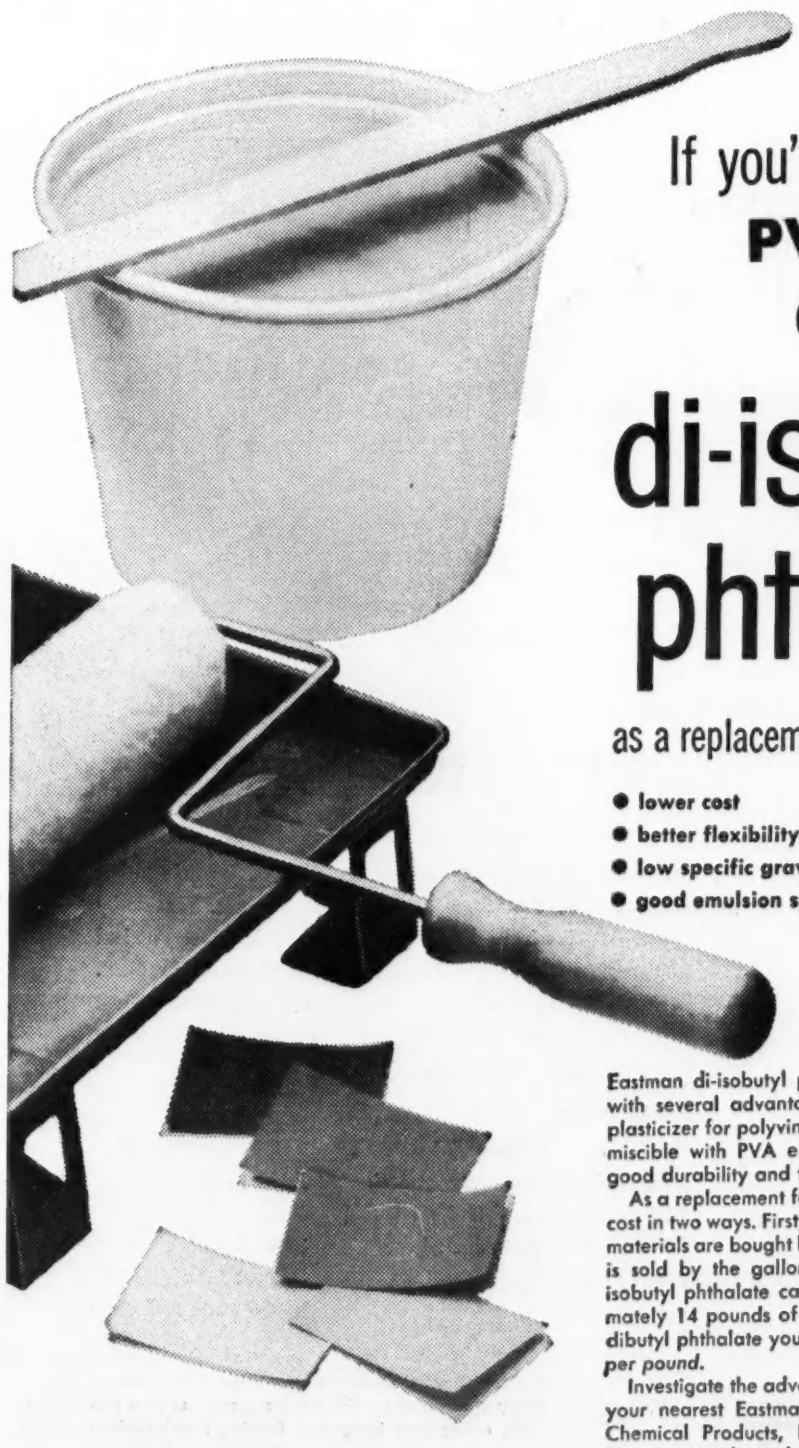
D

2-4-D, tech. dms., c.l., works, frt. equald lb. .41½ - —
l.c.l., works lb. .48 - .50
Dandelion root, bls lb. .35 - .40
DDD, tech. flake, grd., fib. bgs., c.l., works lb. .45 - —
l.c.l., works lb. .48 - —
DDT powder, bgs., c.l., works, frt. equald lb. .27 - —
smaller lots, same basis lb. .29 - —
fib. dms., c.l., same basis lb. .28 - —
smaller lots, same basis lb. .30 - —
1-Decanol, tech., dms., c.l., dlvd. lb. .41 - —
l.c.l., dlvd. lb. .43 - —
tanks, dlvd. lb. .38½ - —
Deertongue leaves, bls lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton 53.40 - —
14½% P, paper bgs., works ton 48.00 - —
17% P paper bgs., works ton 56.00 - —
18% P paper bgs., works ton 69.85 - —
Degras, common, bbls lb. .10 - .12
neutral, less 2% ffa., bbls lb. .23 - .24
over 2% ffa., bbls lb. .22 - .23
d-Desoxyephedrine hydrochloride bots lb. 25.00 - —
dl, bots lb. 6.50 - —
l.c.l., same basis lb. .46½ - .48½
Butyl ester, dms., c.l., works. lb. .43 - —
l.c.l., same basis lb. .48 - .50
Isopropyl ester, dms., c.l., works. lb. .43 - —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 8.95 - —
l.c.l. 100 lbs. 9.10 - —
canary, paper bgs., c.l. 100 lbs. 8.69 - —
l.c.l. lb. 8.84 - —
dark, paper bgs., c.l. 100 lbs. 8.79 - —
l.c.l. 100 lbs. 8.94 - —
white, paper bgs., c.l. 100 lbs. 8.53 - —
l.c.l. 100 lbs. 8.68 - —
Corn dextrin in cotton bgs. 25c. per 100 lbs. higher.
Potato, bgs. lb. .10½ - .11
Dextrose, USP, dms. lb. .17¾ - —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots lb. 4.50 - 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .30¼ - —
l.c.l. works lb. .33¼ - —
tanks, works lb. .28¼ - —
Di-tert-amyl phenol, dms., c.l., works lb. .30¼ - —
l.c.l., works lb. .33¼ - —
tanks, works lb. .28¼ - —
o-Dianisidine, fib, dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .89¾ - .90
l.c.l., same basis lb. .90¼ - .91
tanks, same basis lb. .88 - —
p-Dibromobenzene, bgs., 500-lb. lots lb. .53 - —
Dibutyl phthalate, dms., c.l., dlvd, E lb. .32 - —
l.c.l., same basis lb. .33 - —
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works lb. .68 - —
l.c.l., works lb. .68½ - .69
tanks, works, dlvd lb. .66 - .66½
Tartrate, dms., works, frt. alld lb. .64 - .71
Dibutylamine, dms., c.l., dlvd. lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Di-tert-butyl-p-cresol, dms., c.l., works lb. .91 - —
l.c.l., works lb. .95 - —
Dicapryl phthalate, dms., c.l., dlvd., works lb. .30½ - .31½
l.c.l., same basis lb. .31½ - .32½
tanks, same basis lb. .29½ - —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½ - .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —

o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¼ - —
l.c.l., same basis lb. .13¼ - —
tanks, same basis ln. .10¾ - —
p-Dichlorobenzene, dms., c.l., frt. alld. E lb. .14½ - —
l.c.l., same basis lb. .17 - —
Dichlorodiphenyltrichloroetnane (see DDT).
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
l.c.l., works lb. .05¾ - —
tanks, works lb. .04¼ - —
Dicyclohexylamine, dms., c.l., works. lb. .51 - —
l.c.l., works lb. .51¾ - —
tanks, works lb. .49¾ - —
Dicyclohexyl phthalate, fib dms., c.l., frt. alld. works lb. .58¼ - .59
l.c.l., same basis lb. .59¼ - 60
Dieldrin, dms., frt. alld lb 1.80 - —
l.c.l., frt. alld lb 1.85 - —
Diethanolamine, dms., c.l., dlvd E. lb. .26½ - —
l.c.l., same basis lb. .27½ - —
tanks, same basis lb. .24½ - —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l., same basis lb. .48 - —
tanks same basis lb .45 - —
Ethanolamines, dms., c.l., dlvd lb. .67½ - —
l.c.l., dlvd lb. .68½ - —
tanks, dlvd lb. .65½ - —
Oxalate, dms., c.l., frt. alld lb. .42 - —
l.c.l., same basis lb. .43 - .45
tanks, same basis lb. .40 - —
Phthalate, dms., c.l., dlvd lb. .27 - —
l.c.l., dlvd. lb 28 - —
tanks, dlvd. lb 25 - —
Sulfate, dms., c.l., works lb. .18¾ - —
l.c.l. works lb 19¼ - —
tanks, works lb 17 - —
Diethylamine, dms., c.l., dlvd E lb. .50½ - —
l.c.l., same basis lb. .51½ - —
tanks, same basis lb .48½ - —

N,N-Diethylaniline, dms., c.l., frt. alld lb. .51 - —
l.c.l., same basis lb. .52 - —
tanks, same basis lb .50 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).
Diethylene glycol, dms. c.l., dlvd E. lb. .16½ - —
l.c.l. same basis lb. .17½ - —
tanks, same basis lb. .14¾ - —
Boriborate, dms., l.c.l. lb. .31 - —
Diethyl ether, dms., c.l., works lb. .46½ - —
l.c.l., works lb. .47 - —
Monobutyl ether, dms., c.l., lb. .28¾ - —
l.c.l., dlvd. lb. .29¾ - —
tanks, dlvd. lb. .27 - —
Acetate, dms., c.l., works. lb. .30 - —
l.c.l. works lb. .30½ - —
tanks, dlvd. E lb. .28¼ - —
Monoethyl ether, dms. c.l. dlvd. lb. .22 - —
l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .20 - —
Acetate, dms., c.l., works lb. .26¾ - —
l.c.l. works lb. .27¼ - —
tanks, dlvd E lb. .25¼ - —
Monomethyl ether, dms., c.l., works lb. .20½ - —
l.c.l., works lb. .21½ - —
tanks, works lb. .18½ - —
Diethylenetriamine, dms., c.l., dlvd. E lb. .43 - —
l.c.l. same basis lb. 44 - —
tanks, same basis lb 41½ - —
Diethylstilbestrol, USP, bots. 10 kilo lots kilo 100.00 - —
1-kilo lot kilo 110.00 - —
Digitalis leaves, USP, dom. dms., lb. .90 - 1.10
Digitoxin, USP, bots gram. 5.00 - 5.50

Diglycol laurate, dms. lb. .35 - .38
Oleate, dms lb. .31 - .37
Stearate, dms lb. .26 - .27
Dihexyl sebacate, dms., c.l., works lb. .64 - —
l.c.l., works lb. .64½ - .65
tanks, works lb. 62 - —
Dihydrazine sulfate, dms., works. lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .11 - .12
Sulfate, bulk gram. .11 - .12
2,2-Dihydroxy-5,5'-dichloro-diphenyl-methane, pure, dms lb 2.80 - 3.00
tech. dms lb. 1.04 - 1.14
Di-isobutyl ketone, dms., c.l., dlvd. lb. .15½ - —
l.c.l., dlvd lb. .16½ - —
tanks, same basis lb .13½ - —
Phthalate, dms., c.l., dlvd. E lb. .31 - —
l.c.l. same basis lb. .32 - —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., works lb. .10 - —
l.c.l., works lb. .11 - —
tanks, works lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .32½ - —
l.c.l., same basis lb. .33½ - —
tanks, same basis lb. .26½ - —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½ - .64
tanks, works lb. .61 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .22¾ - —
l.c.l., same basis lb. .23¾ - —
tanks, same basis lb. .20¾ - —
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies lb. .50 - —
l.c.l. same basis lb. .51 - —
tanks, same basis lb .48 - —



If you're formulating **PVA** paints consider

di-isobutyl phthalate

as a replacement for dibutyl phthalate

- **lower cost**
- **better flexibility at low temperatures**
- **low specific gravity**
- **good emulsion stability**

Eastman di-isobutyl phthalate is a clear, colorless liquid with several advantages over di-n-butyl phthalate as a plasticizer for polyvinyl acetate emulsion paints. It is easily miscible with PVA emulsions, producing films that have good durability and flexibility at low temperatures.

As a replacement for dibutyl phthalate, it cuts plasticizer cost in two ways. First, *it weighs less per gallon.* Since paint materials are bought by the pound, while the finished paint is sold by the gallon, this lower specific gravity of di-isobutyl phthalate can mean a quick savings of approximately 14 pounds of plasticizer for every 100 gallons of dibutyl phthalate you replace. Second, *it has a lower cost per pound.*

Investigate the advantages of di-isobutyl phthalate. Call your nearest Eastman sales office or write to Eastman Chemical Products, Inc., Chemicals Division, Kingsport, Tennessee to learn how to lower your costs by using this economical Eastman plasticizer.

Eastman
CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
a subsidiary of EASTMAN KODAK COMPANY

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; New York—260 Madison Avenue; Framingham, Mass.—65 Concord St.; Cincinnati—Carew Tower; Cleveland—Terminal Tower Bldg.; Chicago—360 N. Michigan Ave.; St. Louis—Continental Bldg.; Houston—412 Main St. **West Coast: Wilson Meyer Co.;** San Francisco—333 Montgomery St.; Los Angeles—4800 District Blvd.; Portland—520 S. W. Sixth Ave.; Salt Lake City—73 S. Main St.; Seattle—821 Second Ave.

Dillseed—Dyes, Coaltar

Dillseed, dewhiskered, bgs.....lb. .11 - —
nat., bgs.....lb. .10 - —
Dimethyl anthranilate, cns.....lb. 5.25 - 5.75
Chloroacetal, dms., c.l., works lb. .45 - —
l.c.l., works .....lb. .50 - —
tanks, works.....lb. .40 - —
Ethanolamines, anhyd., dms., c.l., dlvd..lb. 1.43 - —
l.c.l., dlvd .....lb 1.45 - —
tanks, dlvd.....lb. 1.40 - —
70%, dms., c.l., dlvd., 100% basis lb. .68 - —
tanks, dlvd., 100% basis...lb. .66 - —
Hydroquinone, dms. .....lb. 1.70 - 2.75
Phthalate, dms., c.l., works ..lb. .29½- —
l.c.l., works .....lb. .30½- —
tanks, dlvd. .....lb. .27½- —
Sebacate, dms., c.l., works ..lb. 1.27 - —
l.c.l., works .....lb. 1.28 - —
tanks, works .....lb. 1.25 - —
Sulfate, 55-gal., ret. dms., c.l., works lb. .15 - —
l.c.l, works lb .16 - —
10-gal. ret. dms., l.c.l.. works. lb. .16½- —
Dimethylamine, 25% soln., dms., c.l., frt equald lb. .42 - —
l.c.l., frt. equald .....lb. .42½- —
tanks, frt. equald .....lb. .33 - —
40% soln., dms., c.l., frt. equald.lb. .39 - —
l.c.l., frt. equald.....lb. .39½- —
tanks, frt. equald.....lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .29½- —
l.c.l., frt. alld.....lb. .30½- —
tanks, frt. alld.....lb. .28½- —
N,N-Dimethylformamide dms., works. lb. .34 - .39
tanks, works .....lb. .33 - —

2,4-Dinitroaniline, dms., frt. equald lb. .57 - —
m-Dinitrobenzene, 85°C., dms ..lb. .20 - —
89°C., dms .....lb. .22 - —
2,4-Dinitrochlorobenzene, dms., c.t., frt. alld. E lb. .15¼- —
l.c.l., frt. alld E.....lb. .15¾- —
tanks, frt. alld.. E.....lb. .15 - —
2,4-Dinitrophenol, bbls. .....lb. .37 - —
2,4-Dinitrotoluene, oily, dms. ...lb. .10 - —
refd., 68°C., dms. .....lb. .21 - —
Dioctyl adipate. dms., c.l., works. lb. .44½- —
l.c.l. works.....lb. .45½- —
tanks, works .....lb. .42½- —
Phthalate, dms., c.l., frt. alld lb. .32½- —
l.c.l., frt alld .....lb. .33½- —
tanks, frt. alld .....lb. .30½- —
Sebacate, dms., c.l., works, lb. .63 - —
l.c.l. works .....lb. .63½- .64
tanks, works, dlvd .....lb. .61 - .61½
Di-o-tolyguanidine, dms., ton lots, dlvd. lb. .57 - —
smaller lots, dlvd .....lb. .58 - —
1,4-Dioxane, dms., c.l., works...lb. .28¾- —
l.c.l. same basis .....lb .29¼- —
tanks same basis .....lb. .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., l.c.l. works .35 - —
Dipentene, dest-dist., dms., c.l., works gal. .405 - —
l.c.l., works.....gal. .455 - —
ex-whse .....gal. .57 - —
steam-dist., dms., c.l., works, South. gal. .64 - —
dlvd. N. Y.....gal. .82 - —
tanks, works, South.....gal. .50 - —

Diphenyl, bbls., c.l., works.....lb. .15 - —
l.c.l., works .....lb. .16 - —
Diphenyl in bags ¼c. lower.
Oxide, perfume grade, cns....lb. .54 - .61
Phthalate, dms., c.l., works....lb. .51¾- —
l.c.l., works .....lb. .53¾- —
Diphenylguanidine dms., ton lots lb. .48 - —
smaller lots .....lb. .49 - .50
Diphenylhydantoin-sodium USP, dms lb. 8.30 - 5.60
Dipropylene glycol, dms., c.l., frt. alld..lb. .16½- —
l.c.l., same basis.....lb. .17½- —
tanks, same basis .....lb. .14¾- —
Monomethyl ether, dms., c.l., dlvd. E. lb. .20 - —
l.c.l., same basis .....lb. .21 - —
tanks, same basis .....lb. .18½- —
Divi-divi, 45% tannin, bgs., bls., c.l., U.S. ports, exdock..ton.70.00 -72.00
Divinylbenzene. 20-25%. dms., c.l., works..lb. .20 - —
l.c.l., works.....lb. .21 - —
tanks, works .....lb. .19 - —
40-50%, dms., c.l., works, 100% basis. lb. 1.00 - —
l.c.l., works, 100% basis...lb. 1.15 - —
Dodecylbenzene, dms., c.l., frt. equald..lb. .14½- —
l.c.l., same basis .....lb. .15½- —
tanks, same basis .....lb. .12½- —
Dyes, coaltar, certified colors for food, drugs and cosmetics, 5-lb. and 1-lb. lots, dlvd.:—
Blue, FD & C, No. 1, cns.....lb.17.00 -17.60
No. 2, cns .....lb.17.00 -17.60
Green, FD & C, No. 1, cns.....lb.17.00 -17.60
No. 2, cns .....lb.22.20 -2285
No. 3, cns .....lb.35.25 -35.90
Orange, FD & C, No. 1, cns....lb. 3.65 - 3.75
No. 2, cns .....lb. 4.65 - 4.75

Dyes, coaltar, certified colors for food, drugs and cosmetics, 5-lb. and 1-lb. lots, dlvd.:—
Red, FD & C, No. 1, cns.....lb. 7.55 - 7.85
No. 2, cns .....lb. 4.00 - 4.10
No. 3, cns .....lb.22.20 -22.85
No. 4, cns .....lb. 7.20 - 7.50
No. 32, cns .....lb. 5.30 - 5.40
Violet, FD & C, No. 1, cns....lb.17 00 -17.60
Yellow, FD & C, No. 1, cns....lb.10.50 -11.05
No. 3, cns .....lb. 3.30 - 3.40
No. 4, cns .....lb. 3.30 - 3.40
No. 5, cns .....lb. 4.00 - 4.10
No. 6, cns .....lb. 4.00 - 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50 lb. lots, dlvd:—
Black, D&C, No. 1, cns.....lb.10.95 - —
Brown, D&C, No. 1, cns.....lb.16.10 - —
Green, D&C, No. 5, cns.....lb.16.10 - —
No. 6, cns .....lb.16.10 - —
No. 7, cns .....lb.14.80 - —
Orange, D&C, No. 3, cns.....lb 10.95 - —
No. 4, cns .....lb.20.05 - —
No. 5, cns .....lb. 5.70 - —
No. 10, cns .....lb.20.70 - —
Red, D&C, No. 8, cns.....lb. 2.85 - —
No. 9, cns .....lb. 2.85 - —
No. 10, cns .....lb. 2.30 - —
No. 11, cns .....lb. 1.85 - —
No. 12, cns .....lb. 2.65 - —
No. 17, cns .....lb.10.95 - —
No. 18, cns .....lb.24.00 - —
No. 19, cns .....lb.15.45 - —
No. 21, cns .....lb. 3.60 - —
No. 22, cns .....lb.10.95 - —
No. 28, cns .....lb.24.65 - —
No. 33, cns .....lb.17.45 - —
Violet, D&C, No. 2, cns.....lb.16.10 - —
Yellow, D&C, No. 7, cns.....lb.10.95 - —
No. 10, cns .....lb.13.50 - —
No 11. cns .....lb.13.50 - —
Dyes, coaltar, certified, colors for drugs and cosmetics, external use, 1-lb. lots, works, 25-50 lb. lots, dlvd:—
Blue, Ext., D&C, No. 1, cns....lb.16.10 - —
Green, Ext., D&C, No. 1, cns...lb.16.10 - —
Red, Ext., D&C, No. 1, cns ....lb.13.50 - —
Yellow, Ext., D&C, No. 1, cns..lb.10.95 - —
20 Chrysoidine Y, dustless..lb. .81 - —
27 Fast light orange 2G....lb. .99 - —
31 Phloxine 2G.....lb. .81 - —
36 Yellow 2G.....lb. .91 - —
40 Orange R extra, conc.....lb. 1.17 - —
57 Fuchsine 6B.....lb. 1.19 - —
79 Scarlet 2R.....lb. .89 - —
151 Orange AD.....lb. .61 - —
161 Orange RR.....lb. .73 - —
176 Fast red A.....lb. 1.07 - —
179 Rubine XX, conc.....lb. 1.14 - —
180 Blue F4B.....lb. 1.01 - —
185 Brilliant scarlet 3RN, conc. lb. .93 - —
202 Chrome blue black, conc.lb. .75 - —
203 Chrome black T.....lb. .86 - —
208 Fast blue SR .....lb. 1.00 - —
216 Chrome red B.....lb. .84 - —
234 Brown Y.....lb. .98 - —
246 Blue black, extra, conc..lb. 1.05 - —
275 Milling red 3R, conc....lb. 2.03 - —
289 Navy blue 3R, conc.....lb. 1.31 - —
299 Black F, conc.....lb. 1.69 - —
304 Neutral black 2B, conc. lb. 2.21 - —
326 Fast scarlet 4BNC.....lb. 1.64 - —
332 Bismark brown RX, conc. lb. .95 - —
365 Brilliant yellow, conc....lb. 2.83 - —
382 Scarlet B .....lb. 2.00 - —
401 Diazo black BHD.....lb. .72 - —
406 Blue 2B, extra conc.....lb. 1.18 - —
419 Red FC, conc.....lb. 1.12 - —
420 Brown M.....lb. 1.08 - —
448 Red 4BX, conc.....lb. 1.30 - —
518 Diamine sky blue FF, extra, conc. lb. 1.50 - —
561 Brown B.....lb. 2.23 - —
581 Black EB, 200%.....lb. 1.03 - —
593 Green BY, conc.....lb. .79 - —
596 Yellow Brown K, extra..lb. .98 - —
620 Yellow 2G.....lb. 1.79 - —
640 Yellow XX.....lb. 1.61 - —
655 Yellow OX.....lb. 2.04 - —
657 Green V.....lb. 2.10 - —
662 Brilliant green G.....lb. 2.79 - —
667 Brilliant milling green 6B, conc..lb. 3.68 - —
671 Blue EG.....lb. 1.70 - —
681 Crystal violet powder....lb. 2.15 - —
698 Violet 4BXN.....lb. 1.74 - —
720 Brilliant blue BBG.....lb. 1.88 - —
729 Blue B, conc.....lb. 2.79 - —
749 Red BX.....lb. 4.33 - —
814 Yellow NN, conc.....lb. 3.11 - —
841 Safranine GF, extra, conc. lb. 3.17 - —
865 Nigrosine WSJ.....lb. .75 - —
922 Blue GXX .....lb. 1.71 - —
978 Black GXCF, conc.....lb. .32 - —
1034 Alizarine red SC.....lb. 2.59 - —
1054 Alizarine blue SAPX.....lb. 2.91 - —
1078 Alizarine green CG, extra. lb. 2.72 - —
1085 Alizarine blue, black, B lb. 2.33 - —
1096 Golden orange GFD, single paste lb. 1.99 - —
1099 Dark blue BO, single paste. lb. 1.75 - —
1101 Jade green N, double paste. lb. 1.98 - —
1106 Blue RS, double paste..lb. 3.26 - —
1113 Blue BLFD, double paste.lb. 2.48 - —
1150 Olive R, single paste....lb. 1.10 - —
1151 Brown R, single paste...lb. 1.76 - —
1171 Indigo synthetic, 20% paste..lb. .31 - —
1217 Orange RD, single paste..lb. 1.65 - —
p-4 Brown PG.....lb. 2.30 - —
p-14 Brown EB.....lb. 1.66 - —
p-24 Gray L.....lb. 1.60 - —
p-80 Diazo brilliant scarlet ROAD lb. 2.79 - —
p-202 Diazo black VJ, conc....lb. 1.91 - —
p-244 Brilliant scarlet BN.....lb. 1.31 - —
p-313 Naphthol SWF.....lb. 2.42 - —
Dyes, coaltar, for stains, oil-soluble, 100-lb. dms., sellers' works
Black blue No. 550.....lb. .81 - —
Jet No. 551.....lb. .89 - —
Brown R, conc.....lb. 1.72 - —
Orange R, brilliant.....lb. .90 - —
Red 4B, conc.....lb. 1.37 - —
Yellow C.....lb. 1.18 - —
FN, conc.....lb. 1.22 - —
Dyes, coaltar, for stains, spirit-soluble, 100-lb. dms., sellers' works:—
Auramine O.....lb. 1.85 - —
Black, basic blue.....lb. 1.21 - —
Jet .....lb. 1.21 - —
Blue, methylene, 2B, conc....lb. 1.71 - —
Brown Bismarck R, conc....lb. .86 - —
Chrysoidine, R, extra.....lb. .60 - —
Y, extra.....lb. .64 - —
Fuchsine, conc.....lb. 3.06 - —
Green, malachite, conc.....lb. 2.10 - —
Rhodamine, B.....lb. 4.33 - —
Safranine, Y, conc.....lb. 2.90 - —
Violet, methyl, B.....lb. 1.10 - —
Dyes, coaltar, for stains, water-soluble, 100-lb. dms., sellers' works:—
Azo rubine R, extra, conc....lb. 1.04 - —
Black, acid blue, B, extra..lb. .86 - —
Fast light, 3 G, extra.....lb. 2.04 - —
Methanil, conc.....lb. .91 - —
Orange acid, Y, conc.....lb. .47 - —
Scarlet croceine, MOO.....lb. 1.45 - —
Yellow, azo, conc.....lb. .90 - —
Oil-soluble, spirit-soluble, water-soluble in kegs, 3c. higher; tins, 10c. higher.

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SPECIFICATIONS:

Specific gravity of material at 20°C. compared to that of water at 4°C.	1.450 to 1.465
Distillation range, 5 to 95% within	8°C.
Distillation range to include	38.4°C.
Acidity	Neutral
Color	Water white and clear

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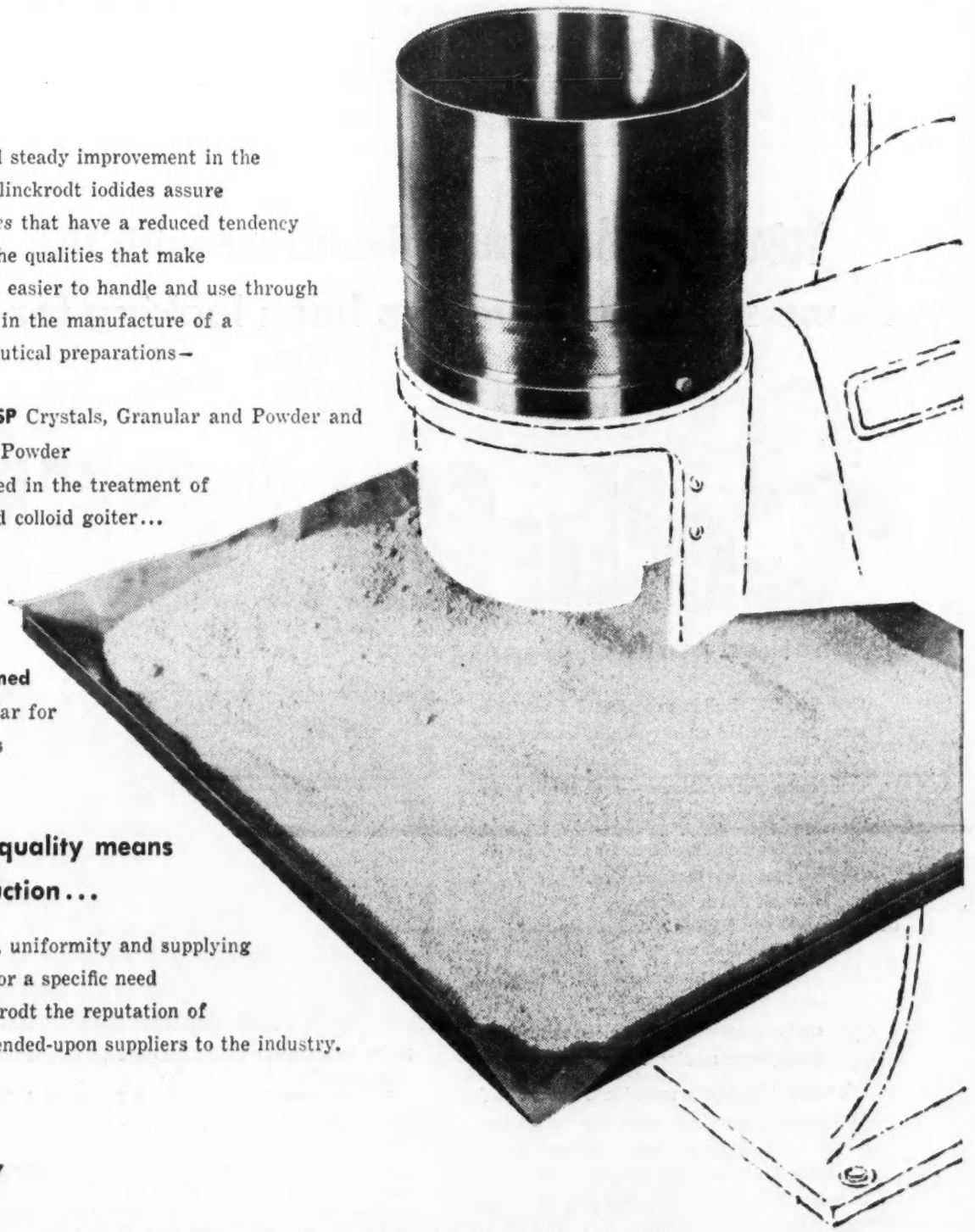
are easier to process



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Thymol Iodide NF
for antiseptic dusting powders...

Iodine USP Resublimed
Crystals and Granular for preparations used as skin disinfectants.

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Echinacea Root—Geranyl Acetate

E

Echinacea root, bls ..... lb. 1.10 - —
Egg albumin (see Albumin).
Yolk, dried, dom., bbls. ..... lb. 1.08 - 1.10
tanners bbls. ..... lb .06 - .06¼
Elm bark, grinding, bls ..... lb. .30 - .32
powd., bbls., bxs ..... lb. .45 - —
select, bundles ..... lb. .75 - —
Emetine hydrochloride, USP, bots ..... oz.32.95 -35.00
Endrin, tech., dms., dlvd., basis 100% ..... lb. 3.75 - —
Ephedrine, syn., USP, anhyd., bots, 100-oz lots ..... oz. .98 - 1.00
hydrous, bots., 100-oz lots ..... oz. .92 - —
Hydrochloride, tins, 100-oz. lots. ..... oz. .75 - —
Sulfate cryst. tins, 100-oz. lots. ..... oz. .72 - —
powd. tins 100-oz lots ..... oz. .73 - —
Epichlorohydrin, dms., c.l., dlvd. ..... lb. .35 - —
l.c.l., dlvd. ..... lb. .36 - —
tanks, dlvd ..... lb. .33 - —
Epinephrine, syn., USP, bots., 100-gram lots gram. .45 - .55
Epsom salt (see Magnesium sulfate)
Ergosterol, unirradiated cryst. kilo. 150.00 - —
Ergot, NF, dms., tin-lined ..... lb 3.00 - —
Eserine salicylate, bots ..... oz.35.75 - —
Sulfate, bots ..... oz.39.50 - —
Ether (see specific product)
Ethyl acetate, nat. ferment., 85-88%, dms., c.l., frt. alld ..... lb. .13 - —
l.c.l., frt. alld ..... lb. .14 - —
tanks, frt. alld ..... lb. .11 - —
95-98%, dms., c.l., frt. alld. ..... lb. .13¼- —
l.c.l., frt. alld ..... lb. .14¼- —
tanks, frt. alld ..... lb. .11¼- —
Ethyl acetate, nat. ferment., 99%, dms., c.l., frt. alld. ..... lb. .13½- —
l.c.l., frt. alld ..... lb. .14½- —
tanks, frt. alld ..... lb. .11½- —
syn., 85-88%, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd ..... lb. .14 - —
tanks, dlvd ..... lb. .11 - —
95-98%, dms., c.l., dlvd ..... lb. .13¼- —
l.c.l., dlvd. ..... lb. .14¼- —
tanks, dlvd. ..... lb. .11¼- —
99%, dms., c.l., dlvd ..... lb. .13½- —
l.c.l., dlvd ..... lb. .14½- —
tanks, dlvd. ..... lb. .11½- —
Acetoacetate, dms., c.l., dlvd. lb. .58 - —
l.c.l., dlvd ..... lb. .59 - —
tanks, dlvd ..... lb. .56 - —
Acrylate, dms., c.l., t.l., dlvd. lb. .41½- —
l.t.l., dlvd. ..... lb. .41½- —
tanks, dlvd ..... lb. .38¾- —
Aminobenzoate, USP (see Benzocaine).
Bromide, tech., 98%, dms., c.l., frt. alld. E ..... lb. .41 - —
l.c.l., frt. alld E ..... lb. .43 - —
Butyl ketone, dms., c.l., works ..... lb. .35½- —
l.c.l., works ..... lb. .36 - —
tanks, works ..... lb. .34 - —
Butyrate, works ..... lb. .80 - 1.02
Carbamate (see Urethane)
Cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works ..... lb. .70 - —
smaller lots, works ..... lb. .72 - .80
vis., 10, 20, 50, 100, 150 cps., ogs., 2,000-lb. lots or more, works ..... lb. .65 - .70
smaller lots, works ..... lb. .67 - .81
Chloride, tech., cyl., works ..... lb. .20 - .22
dms., works ..... lb. .18 - .20
tanks, works ..... lb. .10 - —
Cinnamate, cns. ..... lb. 2.71 - 3.45
Ethyl ethanolamines, mixed, dms., c.l., frt. alld., E. Miss. ..... lb. .42½- —
l.c.l., same basis ..... lb. .43½- —
tanks, same basis ..... lb. .40½- —
indust., dms., c.l., dlvd. E ..... lb. .12 - —
l.c.l., dlvd. E ..... lb. .13 - —
tanks, dlvd. E ..... lb. .10 - —
Ether, absolute, ACS, dms ..... lb. .27 - —
anesthesia, USP, hospitals, 1-lb. cns ..... lb. .89 - —
½-lb. cns ..... lb. .97 - —
¼-lb. cns ..... lb. 1.05 - —
indust., dms., c.l., dlvd. E. ..... lb. .12 - —
l.c.l., dlvd. E. ..... lb. .13 - —
tanks, dlvd. E. ..... lb. .10 - —
Gallate, dms., 100 to 2,000-lb. lots. ..... lb. 3.90 - 4.40
Iodide, cbys., works ..... lb. 3.30 - —
Methacrylate, dms., c.l., and less than truckload, works, frt. equald. ..... lb. .51½- .52
Morphine hydrochloride, USP, bots ..... oz.11.85 - —
Nitrite (see Nitrous ether).
Oenanthate, dms. ..... lb 1.00 - 1.50
Oleate, dms., l.c.l., works ..... lb. No prices.
Oxalate (see Diethyl oxalate).
Silicate dist. (see Tetraethylorthosilicate).
40% available SiO_2, dms., c.l., dlvd. ..... lb. .52 - —
l.c.l., dlvd. ..... lb. .53½- —
tanks, dlvd. ..... lb. .50 - —
N-Ethyl-a-naphthylamine dms. works ..... lb. 1.02 - —
N-Ethyl-o-toluidine, bbls ..... lb. .88 - —
Ethylamine (see Mono Di- or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. ..... lb. .51 - —
l.c.l., frt. alld ..... lb. .52 - —
tanks, frt. alld ..... lb. .50 - —
Ethylbenzene, 99%, dms., c.l. ..... lb. .19½- .20¼
l.c.l. ..... lb. .20½- .21¼
tanks ..... lb. .18¼- —
Ethylene dichloride, dms., c.l., dlvd. ..... lb. .10¼- —
l.c.l., same basis ..... lb. .12¼- —
tanks, same basis ..... lb. .09 - —
Ethylene dichloride prices W. of Rockies 1c per lb higher.
Glycol, indust., dms., c.l., dlvd. E ..... lb. .14¾- —
l.c.l., same basis ..... lb. .15¾- —
tanks, same basis ..... lb. .13 - —
Monobutyl ether, dms., c.l., dlvd. E ..... lb. .21½- —
l.c.l., dlvd. E ..... lb. .22½- —
tanks, dlvd. E ..... lb. .19½- —
Monoethyl ether, dms., c.l., dlvd. E ..... lb. .20½- —
l.c.l., dlvd. E ..... lb. .21½- —
tanks, dlvd. E ..... lb. .18½- —
Acetate, dms., c.l., dlvd. E.lb. .18½- —
l.c.l., dlvd. E ..... lb. .19½- —
tanks, dlvd. E ..... lb. .16½- —
Monomethyl ether dms., c.l., dlvd. E ..... lb. .20½- —
l.c.l., dlvd. E ..... lb. .21½- —
tanks, dlvd. E ..... lb. .18½- —
Acetate, dms., c.l., dlvd. E ..... lb. .28¾- —
l.c.l., dlvd E ..... lb. .29¼- —
tanks, dlvd E ..... lb .27 - —
Monostearate, triple pressed, dms ..... lb. .34 - —
Oxide, dms., c.l., dlvd. E ..... lb. .21 - —
l.c.l., dlvd. E ..... lb. .24 - —
tanks, dlvd. E ..... lb .15 - —
Trichloride (see Trichloroethane)
Ethylenediamine 85-88% dms. c.l., dlvd. E., 100% basis ..... lb. .46 - —
l.c.l., dlvd. E., 100% basis ..... lb. .47 - —
tanks, dlvd. E., 100% basis ..... lb .44 - —
Ethylvanillin, cns., 25-lb lots ..... lb 6.75 - 7.30
smaller lots ..... lb 7.35 - 7.40
Eucalyptol, USP, cns., dms ..... lb 1.40 - 1.50
Eugenol, USP, bots. ..... lb. 2.20 - 3.25
Euphorbia herb, bls ..... lb .15 - .17

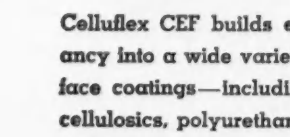
F

Feldspar, 140-200 mesh bulk, c.l., works ..... ton 19.50 - —
Feldspar in bags $3 per ton higher.
Fennel seed, Argentine, bgs ..... lb. .17 - —
Czech, medium, bgs ..... lb. .11 - .12
Indian, light, bgs ..... lb. .12½- .13
Fenugreek seed, Moroccan, bgs. ..... lb. .09½- —
Ferric acetate, liquor, 28°, bbls., c.l., works ..... lb. .09 - —
l.c.l., works ..... lb. .09¾- —
soln., USP IX, cbys ..... lb. .16 - —
dms. ..... lb. .17 - —
Cacodylate, NF, bots ..... lb.13.00 -14.00
Chloride, anhyd., tech., dms., c.l., works ..... 100 lbs. 6.75 - —
l.c.l., works ..... 100 lbs. 8.00 - —
indust., cryst., bbls., c.l., works. ..... 100 lbs. 4.75 - 5.25
l.c.l., works ..... 100 lbs. 5.75 - 6.25
42° Be, cbys., c.l., works. ..... 100 lbs. 7.25 - 8.25
tanks, frt. equald. 100% basis ..... 100 lbs. 3.25 - —
USP cryst., dms., works ..... lb. 07¼- .09
Citrate, gran., dms. ..... lb. .86 - —
Glycerophosphate, NF, powd ..... lb. 4.75 - 4.85
Hydrophosphite, NF, dms ..... lb. 3.45 - —
Naphthenate liq., 6% Fe., dms., frt. alld ..... lb. .25¾- —
Oxalate, gran., dms. ..... lb. .85 - .87
Phosphate, NF, soluble, gran., pearls cs ..... lb. .64 - .65
Pyrophosphate, NF VII, soluble, gran., pearls, dms ..... lb. .78 - .81
Resinate, 6¾% Fe, dms., frt. alld. ..... lb. .29½- —
Stearate, dms., c.l., frt. alld ..... lb. .37 - —
l.c.l., frt. alld ..... lb. .38 - .42
Sulfate, partially hydrated, bgs., c.l., works ..... ton.31.75 -33.75
l.c.l., works ..... ton.34.75 -40.75
Ferric-ammonium citrate, brown, NF, gran., dms ..... lb. .56 - .59
green, USP XII, gran., dms ..... lb. .56 - .59
Oxalate, fine gran., dms ..... lb. .25½- .28½
Ferric-potassium, oxalate, fine gran., dms ..... lb. .30½- .33½
Ferric-sodium oxalate, fine gran., dms ..... lb. .25½- .28½
Ferrous gluconate, NF, dms ..... lb. .83 - —
Sulfate, gran., bgs., c.l., works. ..... ton.34.50 - —
l.c.l., dlvd. Metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ..... ton 40.00 - —
bulk, c.l., works ..... ton 27.00 - —
USP cryst., bbls., dms ..... lb 09½- .10
Fir balsam, Canada, cns ..... gal. 32.00 - —
Oregon, bbls ..... gal. 4.00 - —
Fishliver oil (see Oil fishliver).
Fishmeal, menhaden, ground, dom., 60% protein, bags, Balto area ..... ton.138.00-144.00 N
Fishscrap, menhaden, dried, 60% protein, bgs., Balto area ..... ton.133.00-139.00 N
Formaldehyde, NF, 37%, (inhibited), Zone 1, dms., c.l., dlvd. ..... lb. .0625- —
l.c.l., dlvd ..... lb. .067 - —
tanks, dlvd ..... lb. .0375- —
Zone 2, dms., c.l., dlvd ..... lb. .063 - .066
tanks, dlvd. ..... lb. .0405- —
methanol-free (uninhibited), Zone 1, tanks, dlvd ..... lb. .035 - —
Zone 2, tanks, dlvd ..... lb. .0375- —
Fleaseed (see Psyllium seed).
Fringetree bark, bls ..... lb. .60 - .61
Fuller's earth, bgs., c.l., Ill. mines. ..... ton.19.00 - —
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines ..... ton.17.50 - —
calcined, bgs., c.l., same basis ..... ton.20.00 -21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis ..... ton.16.50 -17.00
200-mesh, bgs., c.l., same basis ..... ton 17.50 -18.00
spent, bgs., c.l., shipt. point ..... ton. 4.50 - 5.00
Furfural, dms., c.l., works ..... lb. .13 - —
l.c.l., works ..... lb. .14 - —
tanks, dlvd. E ..... lb. .12 - —
dlvd. W ..... lb. .13 - —
Fusel oil, refd., dms., c.l., dlvd ..... lb. .22 - —
l.c.l., dlvd. ..... lb. .23 - —
tanks, dlvd. ..... lb. .20 - —
Fustic extract, cryst., No. 1, bbls., l.c.l ..... lb. .47½- —
No. 2, bbls., c.l. ..... lb. .45½- —
No. 3, bbls l.c.l ..... lb. .43½- —
liq., No. 1, bbls., l.c.l. ..... lb. .22½- —
No. 2, bbls., l.c.l ..... lb. .21½- —
No. 3, bbls., l.c.l ..... lb. .19 - —
solid, No. 1, bxs., l.c.l. ..... lb. .45 - —

G

G salt, 100% basis, bbls., frt alld lb. .73 - —
Gammapicoline (see g-Picoline).
Gelatin, edible, pure (pork skin), 75 Bloom test, bbl., c.l. ..... lb. .53 - —
150 Bloom test, bbl., c.l. ..... lb. .64 - —
200 Bloom test, bbl., c.l. ..... lb. .71 - —
225 Bloom test, bbl., c.l. ..... lb. .74 - —
275 Bloom test, bbl., c.l. ..... lb. .81 - —
Gelsemium root, bls ..... lb. .23 - .24
Gentian root, bls ..... lb. .17 - .20
grd., bbls., bxs ..... lb. .22 - .23
powd. bbls., bxs ..... lb. .23 - .24
Geraniol, extra, cns., dms ..... lb. 3.90 - —
standard, cns., dms ..... lb. 3.65 - —
Geranyl acetate, cns ..... lb. 3.90 - —

here it is — the plasticizer with the flame-retardance you've been looking for—



Celluflex* CEF

another product pioneered by Celanese

Celluflex CEF builds exceptional fire-retardancy into a wide variety of plastics and surface coatings—including polyesters, vinyls, cellulosics, polyurethanes—and, in all probability many other polymers and copolymers.

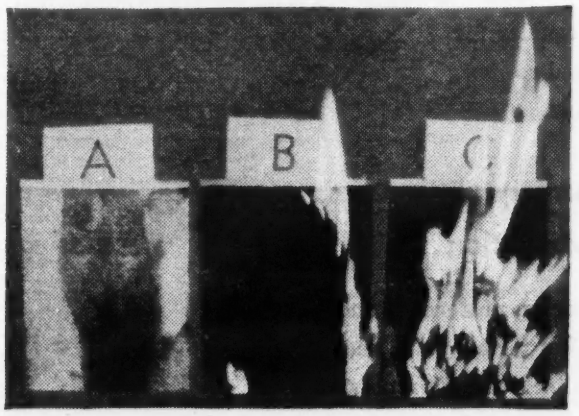
Here, for the first time in commercial quantities, is a plasticizer that provides:

flame-retardance and chemical stability

plus

excellent low temperature properties . . .
ultraviolet light stability . . .
and a water-white color clear enough for transparent coatings.

We would like you to examine Celluflex CEF in relation to your application. Use the coupon below for test sample and technical data. Celanese Corporation of America, Chemical Division, Dept. 656 E 180 Madison Avenue, New York 16, N. Y.



FLAME RETARDANCY TEST. 3 lacquers were formulated using same basic formula with exception of plasticizer. In Case A, it was Celluflex CEF (tris β-chloroethyl phosphate); Case B, tricresyl phosphate; Case C, dibutyl phthalate.

Lacquers were sprayed on panels, then ignited for 7 seconds. Upon removal of flame, Panel B and C continued to burn but Panel A (Celluflex CEF lacquer) extinguished itself within 2 seconds!

Celanese Corporation of America
Chemical Division, Dept. 656-E
180 Madison Avenue, New York 16, N. Y.

If Celluflex CEF can be useful in _____
_____ send me test sample and technical literature.

NAME _____
TITLE _____
COMPANY _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

Celanese CHEMICALS

*Reg. U. S. Pat. Off.

Ginger oleoresin, NF, from African root, bots..lb. 4.00 - 7.75
from Jamaican root, bots..lb. 6.00 -10.25
Root, African, bls.....lb. .35 - .36
Jamaica, No. 1, bgs.....lb. No prices.
No. 2, bgs.....lb. .46 - —
No. 3, bgs.....lb. .45 - —
Nigerian, split, bgs.....lb. .30 - .31
Glauber's salt, anhyd. (see Sodium sulfate).
Glue, bone, extracted, 86 jellygrams, bgs., c.l., dlvd..lb. .15 - —
104 jellygrams, same basis..lb. .17 - —
131 jellygrams, same basis..lb. .18 - —
164 jellygrams, same basis..lb. .20½ - —
191 jellygrams, same basis..lb. .21 - —
222 jellygrams, same basis..lb. .22 - —
packers' 40 jellygrams, bgs., c.l., dlvd..lb. .14 - —
65 jellygrams, same basis..lb. .14½ - —
86 jellygrams, same basis..lb. .15 - —
115 jellygrams, same basis..lb. .15½ - —
135 jellygrams, same basis..lb. .18½ - —
164 jellygrams, same basis..lb. .19½ - —
renderers' 115 jellygrams, bgs., c.l., dlvd..lb. .15 - —
Bone glue, l.c.l. prices 1c. higher.
Hide, 70-94 jellygrams, bgs., c.l., dlvd..lb. .15 - —
95-121, bgs., c.l., dlvd.....lb. .16 - —
122-149, bgs., c.l., dlvd.....lb. .18½ - —
150-177, bgs., c.l., dlvd.....lb. .21 - —
178-206, bgs., c.l., dlvd.....lb. .23½ - —
207-236, bgs., c.l., dlvd.....lb. .26 - —
237-266, bgs., c.l., dlvd.....lb. .28 - —
267-298, bgs., c.l., dlvd.....lb. .30 - —
299-330, bgs., c.l., dlvd.....lb. .32 - —
331-362, bgs., c.l., dlvd.....lb. .34 - —
363-394, bgs., c.l., dlvd.....lb. .36 - —
395-427, bgs., c.l., dlvd.....lb. .38 - —
428-460, bgs., c.l., dlvd.....lb. .39 - —
461-494, bgs., c.l., dlvd.....lb. .40 - —
495-529, bgs., c.l., dlvd.....lb. .41 - —
Hide glue l.c.l. prices 1c. higher.
Glycerine, nat., crude, saponification, 88%, to refineries, tanks, works..lb. .23 - .23½
soapiye, 80%, tanks, works lb .21 Nom.
refd., BP, 98%, dms., c.l., dlvd. lb. .30½ - —
l.c.l., dlvd.....lb. .31 - —
tanks, dlvd.....lb. .30 - —
dynamite, dms., c.l., dlvd lb. .30½ - —
l.c.l., dlvd.....lb. .31 - —
tanks, dlvd.....lb. .30 - —
high gravity, dms., c.l., dlvd.lb. .30½ - —
l.c.l., dlvd.....lb. .31 - —
tanks, dlvd.....lb. .30 - —
USP, CP, 95%, dms., c.l., dlvd. lb. .29½ - —
l.c.l., dlvd.....lb. .30 - —
tanks, dlvd.....lb. .29 - —
yellow, distilled, dms., c.l., dlvd..lb. .30 - —
l.c.l., dlvd.....lb. .30½ - —
syn., dms., c.l., dlvd.....lb. .30½ - —
l.c.l., dlvd.....lb. .31 - —
tanks, dlvd.....lb. .30 - —
Glycine (see Acid aminoacetic).
Glycerol (see Glycerine).
Glyoxal, 30%, dms., c.l., works..lb. .18½ - —
l.c.l., works.....lb. .19 - —
tanks, works.....lb. .18 - —
Golden seal root, NF, tested, bls. lb. 2.25 - 2.50
powd., bxs.....lb. 2.75 - 3.25
Graphite, amorph., powd., bgs., fib. dms., ex whse lb. .06 - .09½
crystalline, 88-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, brown, tanks, dlvd.....lb. .05⅝ Nom.
house, tanks, dlvd.....lb. .06½ - —
white, choice, not all hog, tanks, dlvd..lb. .07⅜ - —
yellow, tanks, dlvd.....lb. .06⅜ - —
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs, works. lb. 5.10 - —
tungstated, PTMA, kgs., works..lb. 6.20 - —
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis.....lb. .38 - —
16-30%, bbls., same basis..lb. .39 - —
31-45%, bbls., same basis. lb. .40 - —
45-49%, bbls., same basis. lb. .43 - —
50%, bbls., same basis lb. .48 - —
Reduced color, 25%, bbls., same basis..lb. .19 - —
Chrome green prices are ½c. higher, dlvd., at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Chromium oxide, hydrated, bbls., dms., c.l., frt. alld.....lb. 1.00 - 1.10
pure, bgs., c.l., frt. alld....lb. .40 - —
l.c.l., same basis.....lb. .40¼ - —
Dyes (see Dyes, coaltar).
Malachite, straight, PTMA, bbls., works..lb. 4.60 - —
Paris (see Paris green).
Phthalocyanine toner, bbls., works. lb. 3.95 - —
resinated, bbls.....lb. 3.50 - —
water dispersable, bbls....lb. 1.71 - —
Pigment B, kegs.....lb. 1.35 - —
paste, kegs.....lb. .38 - —
Grindelia robusta herb, bls.....lb. .38 - .40
Guaiacol, NF, cryst., dms., tins..lb. 2.10 - 2.15
liq., chys., dms.....lb. 2.30 - 2.40
Carbonate, NF VII, dms.....lb. 3.40 - 3.45
Gum, aloe (see Aloe).
Arabic, amber, sorts, bgs.....lb. .22 - .23
powd., USP, bbls.....lb. .27 - .28
Asafetida (see A).
Asphaltum (see A).
Benzoin, Sumatra, cs.....lb. .38 - .42
Camphor (see C).
Cellulose, high vis., bgs., 23,000-lb. lots or more, works, frt. alld..lb. .55 - —
smaller lots, same basis....lb. .57 - —
Copal, Congo, No. 1, bgs.....lb. .21 - .23
No. 2, bgs.....lb. .18½ - .20
No. 3, bgs.....lb. .16½ - .18
Manila C, bgs.....lb. .42 - .44
CBB, bgs.....lb. .35 Nom.
DBB, bgs.....lb. .33 - .35
DK, bgs.....lb. .22 - .24
dust, bgs.....lb. .14 - .16
MA, soft, bgs.....lb. .24 - .26
WS, bgs.....lb. .34 - .36
Philippine, pale, chips, bgs. lb. .25 - .27
nubs, bgs.....lb. .34 - .36
seeds, bgs.....lb. .20 - .22
sorts, bgs.....lb. .23 - —
Gum, copal, Pontianak, chips, bgs. lb. .28 - —
nubs, bgs.....lb. .39 - .40
Dammar, Batavia, AAM, cs...lb. .27 - .29
dust, bgs.....lb. .16½ - .17½
E, bgs.....lb. .20 - .22
East India, batu, bold, bgs....lb. .14 - .15½
nubs and chips, bgs.....lb. .08 - .09
black, bold, bgs.....lb. .14 - .16
unscraped, bgs.....lb. .11 - .13
nubs and chips, ogs....lb. .11 - .13
pale, chips, bgs.....lb. .13½ - .14½
nubs, bgs.....lb. .18 - .20
Siam, cs.....lb. .37 - —
Singapore, No. 1, bgs.....lb. .43 - .45
No. 2, bbls.....lb. .27 - .29
No. 3, bbls.....lb. No stocks.
dust, bgs.....lb. .16½ - .17
seeds, bgs.....lb. .20 - .22
Ester, gum-rosin type, dms., c.l., dlvd. Ill., Ind., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W Va lb. .15½ - —
wood-rosin type, dms. c.l., same basis lb. .15 - —
Guar, tech. grade, bgs., c.l. lb. .32 - —
food grade, l.c.l.....lb. .40 - .50
Karaya, No. 1, NF, powd., bbls. lb. .55 - —
No. 2, powd., bbls.....lb. .45 - —
No. 3, powd., bbls.....lb. .40 - —
Locust bean, powd., bgs.....lb. .28 - .30
Myrrh, cs.....lb. .38 - .40
Opium (see O).
Olibanum siftings, cs.....lb. .15 - .20
tears, cs.....lb .22 30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).
Tragacanth, No. 1, ribbons, cs lb. 3.00 - 3.50
No. 2, cs.....lb 2.55 - 2.60
No. 3, cs.....lb. 1.75 - 1.80
powdered, USP, bbls.....lb. 1.25 - 1.35
Gypsum, plaster of paris, 100-lb. paper, bgs., trucks, dlvd. N. Y. C. ton 20.30 - —
terra alba., dom., paper bgs., same basis ton.19.00 - —
works, N. Y. C.....ton.16.00 - —
imp. English, 100-lb. paper bags, ex dock, N. Y. C. ton 55.00 - —
ex warehouse.....ton.60.00 -62.00

H

Hawthorn berries, bgs.....lb .28 .32
Heliotropin, cryst., cns.....lb. 3.50 4.25
Helonias root, bls.....lb. 1.75 2.00
Hematine extract, cryst., No. 1, bbls. l.c.l. lb .47 - —
No. 2, bbls. l.c.l.....lb. .43 - —
No. 3, bbls. l.c.l.....lb. .41 - —
No. 4, bbls. l.c.l.....lb. .39 - —
No. 5, bbls. l.c.l.....lb. .37 - —
paste No. 1 bbls. l.c.l.....lb .20½ - —
Henbane leaves, bls.....lb. .35 .40
Heptane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex.....gal. .14¾ - —
Borger, Tex.....gal. .14¾ - —
Hesperidin methylphalcone, bots., works lb 50.00 - —
Hexachlorophene, dms.....lb 2.60 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C. lb. .222 - —
1,000-19,999-lb. lots, same basis lb. .232 - —
smaller lots, same basis... lb. .242 - —

Ginger Oleoresin—Hyoscine Salts

Hexamethylenetetramine, tech., fib., dms., 1,000-lb. lots or more, same basis lb. .239 - —
smaller lots, same basis lb. .249 - —
USP, dms., 500-lb. lots or more, same basis lb. .40½ - —
smaller lots, same basis lb. .41½ - —
Hexane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex.....gal. .15½ - —
Borger, Tex.....gal. .15½ - —
1-Hexanol, dms., c.l., works.....lb. .34½ - —
t.c.l., works.....lb. .35 - —
tanks, works.....lb .33 - —
Hexyl cinnamic aldehyde, dms.....lb. 4.00 - 7.50
Salicylate, dms.....lb 1.75 - —
Hexylene glycol, dms., c.l., dlvd..lb. .16 - —
l.c.l., dlvd.....lb. .17 - —
tanks, dlvd.....lb. .14 - —
n-Hexyl methacrylate, dms., less than truckload, works lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb 14.00 - —
smaller lots, dlvd.....lb.14.50 - —
Histamine diphosphate, USP, bots. kilo.400.00 - —
l-Histidine hydrochloride, NF, fib, dms., 50-kilo lots, works. kilo 80.00 -85.00
1-5 kilo lots, works.....kilo.90.00 -95.00
Homatropine hydrobromide, USP, bots oz. 8.50 - —
Methylbromide, USP, bots.. oz. 5.65 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.50 - —
Horehound herb, bls.....lb. .16 - .19
Hyoscine salts (see Scopolamine).

ADVANTAGES FOR ALKYDS . . . WITH

Glycerine

500F

420F

EASIER COOKING . . . whatever the temperature

Years of actual plant experience have demonstrated that Glycerine makes cooking of alkyd resins easier. Danger of gelling in the kettle is greatly reduced—which helps prevent costly tie-ups of men and equipment. Cooking can be carried on without complications over a wider range of temperatures.

And Glycerine has other important advantages in making alkyds, too:

- Its low MW/Hydroxyl ratio makes a wide range of resin properties economically feasible.
- Its chemistry has been thoroughly evaluated. Methods are perfected and literature abundant.
- Its liquid state simplifies handling problems. There are no bags to lift, no fines.

As year after year proves . . . *nothing takes the place of Glycerine.*

This balanced group of properties keeps Glycerine's usefulness growing

HYGROSCOPICITY • STABILITY • SOLVENT POWER • VISCOSITY • NONVOLATILITY • NONTOXICITY • TASTE • MW/HYDROXYL RATIO • HUMECTANT • CARRIER • SOLVENT • LUBRICANT • SOFTENER • EMOLLIENT • ANTI-FREEZE • ALKYD BASE •

☑ CHECK AND SEND FOR TECHNICAL DATA

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☐ 12-page booklet on Glycerine standards and specifications

☐ 16-page booklet on Glycerine properties and applications

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Hydrastine—Lithium Hydride

Hydrastine bots ..... oz. 29.50 -31.00
Hydrochloride, NF, bots .... oz. 29.50 -31.00
Sulfate, bots ..... oz. 35.00 -37.00
Hydrastinine, 10-grain bots ..... bot. 1.95 - —
Hydrastis (see Goldenseal.
Hydrazine, free base, ret. dms., Lake Charles, La lb. 3.00 - 3.30
Hydrate, 100%, ret. dms., Lake Charles, La lb. 1.60 - 1.90
85% ret. dms., same basis lb. 1.35 - 1.55
Hydrocortisone acetate, bulk, bots., dms gram 6.00 - —
alcohol, bulk, bots., dms gram 6.00 - —
Hydrofuramide, dms., fib. ctns., works lb .30 - .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 - —
t.c.l., works lb. .55 - .60
Fluoride anhyd., cyls., dlvd. E dlvd. W lb. .30½- .32½
tanks, works lb. .21 - —
Peroxide, USP, bbls., dlvd. .... lb. .03¾- .05
35%, dms., c.l., dlvd ..... lb. .202 - —
t.c.l., dlvd. lb. .211 - —
tanks, dlvd. lb. .1800- —
Hydroquinone photo grade bbls. dms lb. .98 - 1.00
tech., dms., c.l., dlvd ..... lb. .77½- —
t.c.l., same basis ..... lb. .79½- —
Hydroxycitronellal, cns ..... lb 5.10 6.00
Hyoscyamine, bots ..... oz. 15.75 -16.00
Hydrobromide, bots ..... oz. 11.00 -12.00
Sulfate, bots ..... oz. 10.50 -11.50
Hypernic extract, cryst. No. 2, bbls., t.c.l. lb. .52 - —
liq., No. 1, bbls., t.c.l. ..... lb. .35 - —
No. 2, bbls., t.c.l. ..... lb. .27 - —

I

Ichthammol, NF, dms ..... lb. .60 - .75
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots ..... lb. 17.00 -21.00
Inositol, bots., dlvd ..... lb. 5.00 - —
cms., dlvd ..... lb. 4.50 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs ..... lb. 1.45 - —
resub, USP, dms., jars ..... lb. 2.55 - 2.57
Iodochlorohydroxyquinolin, USP, dms lb. 5.90 - —
Iodoform, NF, dms., kgs ..... lb. 4.90 - 5.00
a-Ionone, cns. ..... lb 6.50 - 8.00
b-Ionone, cs. ..... lb. 6.00 - 7.70
Methyl (see under M)
Ipecac root, bgs. ..... lb. 9.00 - —
powd., bbls., bxs ..... lb. 10.00 -10.25
Irish moss, bleached, prime, bls lb. .30 .35
Iron Compounds (see Ferric or Ferrous).
Isoborneol, cns ..... lb. 1.25 - 1.70
Isobornyl acetate cns ..... lb. .92 - .95
formate dms. ..... lb. .80 - —
Propionate dms ..... lb. 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
solvent grade dms., c.l. dlvd E. of Rockies lb. .13¼- —
t.c.l., same basis .... lb. .14¼- —
tanks same basis ..... lb. .11¼- —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
t.c.l., dlvd ..... lb. .28½- —
tech., dms., c.l., dlvd ..... lb. .21½- —
t.c.l., dlvd ..... lb. .22½- —
tanks, dlvd ..... lb. .19½- —
Isoeugenol, cns. ..... lb. 4.40 - 4.75
Isoniazid, powd., bulk, 25-kilo lots or more kilo 23.00 -25.50
smaller lots ..... kilo 24.00 -26.00
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works ... lb. .24¼- —
t.c.l., works ..... lb. .24¾- —
tanks, works ..... lb .22½- —
Isopropanol (see Alcohol, Isopropyl).
Isopropyl acetate, dms., c.l., dvld. lb. .12 - —
t.c.l., same basis ..... lb. .13 - —
tanks, same basis ..... lb. .10 - —
Alcohol (see Alcohol, Isopropyl).
Isopropyl benzene (see Cumene).
Ether, dms., c.l., dlvd ..... lb. .07 - —
t.c.l., dlvd ..... lb. .08 - —
tanks, dlvd ..... lb .05 - —
Isopropyl-N-(3-chlorophenyl) carbamate, 70% CIPC in xylol, dms., c.l., t.l., works lb. .70 - —
t.c.l., works ..... lb. .714 - .814
Isopropyl-N-phenyl carbamate, 450-lb. fib dms., c.l., t.l., works. lb. .75 - —
t.c.l., works ..... lb. .80 - .90
Isopropylamine (see Mono, Di, or Tri-).
Isoquinoline, dms., works ..... lb. .85 - 1.25

J

Jalap root, NF, bls ..... lb. .38 - .55
powd., bbls., bxs ..... lb. .49 - .66
Juniper berries, bgs ..... lb. .18 - .20
Tar, NF, dms ..... lb. .42 - .60

K

Kaolin (see also Clay China),
NF, powd., fib. dms. ..... lb. .10 - .12
colloidal, fib., dms. ..... lb. .15½- .17½
Kola nuts, bgs ..... lb. .15 - —

L

Lactose, crude, bgs., c.l., works lb. .15 - —
edible, fib dms., 30 000-lb. lots, works lb. .22 - —
2,000-lb. lots, works ... lb. .22¾- —
200-1,800-lb lots, works .. lb. .23¼- —
Edible lactose in bgs. 1c. lower
USP, fib. dms., 30,000-lb. lots, works lb. .24 - —
2,000-lb lots, works lb .24¾- —
200-1,800-lb. lots, works .. lb .25¼- —
USP lactose in bgs. 1c. lower
Lady's slipper root, bls lb 1.70 1.75
Lanolin, cosmetic, dms. works lb .28 .30
USP, anhyd., dms., works .... lb. .26 .28
hydrous, dms., works ..... lb. .25 .27
Lard, cash, dms., Chicago ..... lb. .12¼- —
Larkspur seed, bgs ..... lb. .20 .23
Laurel leaves, Greek, bls. ..... lb. .14 - —
Portuguese, bls. ..... lb. .13 - —
Turkish, bls. ..... lb. .21 - .22
n-Lauryl chloride, dist., dms., c.l., works, frt. equald lb .74 - —
t.c.l., same basis lb .75 - —
Methacrylate, dms., c.l., or t.l., works lb. .65½- —
Lavender flowers, medium, bls lb. .55 - .60
ord., bls ..... lb. .16 - .20
select., bls ..... lb. .90 - —
Lead acetate, white, cryst., bbls lb. .22 - —
gran., bbls ..... lb. .23 - —
powd., bbls ..... lb. .23 - —
N. cryst., gran., powd ..... lb. .31 - .32
Arsenate, acid powder, dealers, 3-lb. bgs, or larger, c.l., frt. alld. on 96 lbs. or more lb. .27½- —
t.c.l., frt alld lb. .28½- —
1-lb bgs., c.l. ..... lb. .41½- —
t.c.l. ..... lb. .42½- —
Blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .15¾- —
t.c.l., same basis .... lb. .16¾- —
Carbonate (see Lead, white).
Chloride, dms. ..... lb. .45 - —
Iodide, NF, V jars ..... lb 3.82 - —
Linoleate, fused, 26%% Pb, dms. ..... lb. .33 - —
Metal, pigs, prime, N. Y ..... lb. .15 - —
St. Louis ..... lb. .1480- —
Metallic paste, dms., 20,000,-10,000- ..... lb. .33¾- —
Metallic paste, dms., 20,000.-40,000-lb. lots lb. .33¾- —
10,000-20,000-lb. lots, same basis lb. .34¾- —
200-2,000-lb. lots, same basis. lb. .35¾- —
Prices ex wnse, Jersey City, N. J., 4½c per lb. higher
Monosilicate, bgs., c.l., works, frt. equald lb. .1580- —
t.c.l. same basis lb. .1630- —
Naphthenate, liq., 16% Pb. dms., dlvd lb. .17 - —
24% Pb., dms., dlvd ..... lb. .21 - —
solid, 37% Pb., dms., dlvd ... lb. .27½- —
Nitrate, bbls ..... lb. .22¼- —
Orthosilicate-silica gel, 50-60% PbO, dms., works lb. .29¾- .34¼
Peroxide, tech., powd., bbls lb. .38¾- .40¼
Phthalate, dibasic, dms., works. lb. .41 - —
Red, 95% Pb_3O_4, or less bbls., t.c.l., same basis .... lb. .18 - —
97% Pb_3O_4, bbls., c.l., same basis lb. .17¾- —
t.c.l., same basis lb. .18 - —
98% Pb_3O_4, bbls., c.l., same basis lb. .18 - —
t.c.l., same basis lb. .18½- —
Resinate, precip., 23% Pb. dms., dlvd lb. .32½- —
Salicylate, normal, dms., works lb. .40 - —
Sulfate (see Lead, blue, basic sulfate, Lead, white, basic sulfate).
Tallate, liquid, 16% Pb., dms lb. .15 - —
24% Pb., dms ..... lb. .18½- —
solid, 30% ..... lb. .23¼- —
White, basic carbonate, bgs., c.l., shipt. point, frt. alld lb. .17½- —
t.c.l., same basis .... lb. .18½- —
silicate, bgs., c.l., shipt. point, frt. alld lb. .16 - .19¼
t.c.l., same basis .... lb. .17 - .20¼
sulfate, bgs., c.l., shipt. point, frt. alld lb. .15¾- —
t.c.l., same basis .... lb. .16¾- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works lb. .15 - .17
t.c.l., same basis .... lb. .15½- .17½
unbleached, non-ret., dms., c.l., same basis lb. .13 - .15
t.c.l., same basis ..... lb. .14½- 16½
dl-Leucine, dms., works ..... lb. 12.25 -15.00
Licorice root, whole, bbls ..... lb. .10 - .12
gran., bbls ..... lb. .15 - .17
powd., bbls ..... lb. .12 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½- —
t.c.l., works lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., N. Y. destination, freight equalized with nearest producing point. ton 18.71 - —
Hydrated, bulk, c.l., same basis. ton 20.21 - —
Spray, bulk, same basis ..... ton 23.21 - —
Lime salts (see Calcium)
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite),
Limestone, grd., bgs., works ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 6.40 - 7.65
ex lignaloe wood oil, dms .... lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms. lb. 6.15 - 7.95
96-98%, dms ..... lb 6.75 - 7.15
ex petitgrain, bots. ..... lb. 5.95 - 6.70
Lindane, 25% formulation, dealers, dms., works lb 1.58 - —
99%, tech., dealers, dms., dlvd., lb 3.10 - —
Linden flowers with leaves, bls lb. .30 - —
without leaves, bls ..... lb. .35 - —
Linseed meal, expeller, 32-34% bulk. Midwest, mills ton 59.00 - —
extracted, 36%, bulk, same basis. ton 55.00 -55.50
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .16½- —
t.c.l., same basis ..... lb. .17 - —
Lithium benzoate dms lb 1.65 - 1.67
Bromide, NF, dms., works, frt. equald lb. 2.16 - —
Carbonate, NF, dms., c.l., t.l., dlvd. lb. 1.29½- —
ton lots to t.l., dlvd .. lb. 1.30 - —
tech., dms., c.l., t.l., dlvd., frt. alld., works lb. .85 - 1.12½
t.c.l., same basis ..... lb. .90 - 1.13½
Chloride, CP, anhyd., ton lots lb. 1.28½- —
tech., cryst., dms., c.l., t.l., dlvd., frt. alld., works lb. 1.05 - 1.10½
t.c.l., same basis .... lb. 1.10 - 1.25
Citrate, NF, dms. ..... lb. 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd. lb 2.17½- —
- ton lots, dlvd ..... lb 2.22½- —
less ton lots, dlvd. ..... lb. 2.32½- —
Hydride, powd., dms., works .lb. 14.00 - —

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Hydrogen peroxide has infinite possibilities in organic oxidation reactions and is playing its part in the production line of many manufacturers. It is being used in the commercial manufacture of many epoxy compounds including plasticizers and selective insecticides, and in the production of pharmaceuticals such as cortisone, anti-histamines and others.

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CHEMICAL PROGRESS WEEK-MAY 16-21

Lithium hydroxide, monohydrate, dms., c.l., t.l., dlvd., frt. alld., works lb. .90 - .90¼
l.c.l., same basis lb. .91½ - .96
Manganite, dms., works lb. .95 - 1.15
Nitrate, dms., 100-lb. lots lb. 2.25 - —
Salicylate, dms lb. 1.60 - 1.70
Silicate, dms., works lb. 1.10 - 1.30
Sulfate, dms., 100-lb. lots lb. 1.45 - —
Titanate dms., works lb. 1.15 - 1.35
Lithopone, ord., bgs., c.l., dlvd. lb. .07½ - —
t.c.l., dlvd lb. .08¼ - .08½
titanated (high-strength), bgs., c.l., dlvd. lb. .10 - —
l.c.l., dlvd lb. .11 - —

Lithopone prices, Pacific Coast, 1c. per lb. higher.

Lobelia herb, bls lb. 1.25 Nom.
Lobeline sulfate, bots., works oz. 29.50 -33.50
Logwood extract, cryst., No 1, bbls., l.c.l lb. .41 - —
No 2, bbls t.c.l lb. .39 - —
liq., No. 1, bbls., l.c.l. lb. .20 - —
No 2, bbls. l.c.l. lb. .19 - —
No 3, bbls l.c.l. lb. .18½ - —
solid, No. 1, l.c.l. lb. .35 - —
Lycopodium, cs. lb. 2.00 - 2.25
di-Lysine hydrochloride, bots. kilo. 140.00 -150.00

M

Mace, Siauw, No. 1, bls. lb. 1.40 - —
West Indian, No. 1, bls lb. 1.39 - —
Magnesia, calcined, tech., bgs., ctns., works lb. .25¼ - .26
Syn. rubber grade, light, bgs., c.l., works lb. .29¼ - —
l.c.l., works lb. .30 - —
extra light, works lb. .29¼ - .30
USP, light, ctns lb. .35 - .36
heavy, bbls lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton 82.50 - —
dead-burnt, standard grain, bulk, c.l., Chewalah, Wash ton 38.00 - —
Magnesium bromide, jars lb. .90 - 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .10½ - —
l.c.l., frt. equald lb. .12 - .13
truckloads, frt. equald lb. .11 - —
USP, bgs., c.l., frt. equald lb. .12½ - —
t.l., frt. equald lb. .13 - —
l.c.l., frt. equald lb. .14 - .15

Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.

Magnesium chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾ - —
t.c.l., same basis lb. .14 - .15
hydrous, 99% flake, bgs., c.l., works ton 50.00 - —
l.c.l., bgs ton 55.00 -105.00
Gluconate, dms., cns lb. 1.30 - 1.37
Glycerophosphate, dms., works lb. 5.40 - 5.50
Hydroxide, NF, medicinal, bbls., dms., kgs lb. .26½ - .30
Metal, 99.8% ingots, cs., works lb. .28½ - .297
sticks, cs., works, frt. alld. on carlots lb. .49 - —
Oxide (see Magnesia calcined)
Peroxide, 15%, dms., works lb. 1.00 - 1.03
Phosphate, tribasic, NF, bbls. lb. .75 - —
Silicate (see Talc).
Silicofluoride, bbls., works lb. .09 - .10
Sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
t.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
t.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
smaller lots 100 lbs. 3.35 - —
Trisilicate, USP, dms., 5,000-lb. lots lb. .38 - —
1,000-lb lots lb. .40 - —
100-lb lots lb. .45 - —

Bulky and super grades of magnesuim trisilicate, 7c. per lb. higher.

Malathion, dms., c.l., works lb. .94 - —
l.c.l., works lb. .96 - .98
Maleic anhydride, dms., c.l., dlvd. E lb. .27 - —
l.c.l., dlvd E lb. .28 - —
tanks, same basis lb. .26 - —

Prices on maleic anhydride W. of Rockies, 1½c. higher.

Mandrake root, bls lb. .38 - —
Manganese acetate, bbls., dlvd. lb. .35 - —
Arsenate, bgs lb. .16 - —
Borate, tech., fib. dms lb. .25 - —
Carbonate, bbls., works lb. .22 - —
Chloride, anhyd., dms., works lb. .25½ - —
Dioxide, African, 84-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works ton 91.50 - —
paper bgs., works ton 88.00 - —
dms., works ton 94.00 - —

Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.

Gluconate, dms. lb. 1.79 - 1.93
Glycerophosphate, NF, fib dms lb. 4.70 - 4.80
Hydrate, bbls., dlvd lb. .36 - —
Hypophosphite, NF, dms lb. 3.52 - —
Linoleate, liq., 4.35% Mn., dms. lb. .32½ - —
solid, precip., 8.2% Mn. bbls. lb. .37½ - —
oncarlots lb. .49 - —
Naphthenate, liq., 6% Mn., dms., frt. alld lb. .27 - —
Resinate, fused, 3½% Mn, dms. lb. .24 - —
precip., 6½-7% Mn, dms lb. .28 - —
Sulfate, fertilizer grade, 65%, bgs., c.l., dlvd. S. E ton 80.50 - —
l.c.l., dlvd. S. E ton 87.50 - —
Tallate, 6% dms lb. .24 - —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton 68.50 - —
So. American 30% tannin, c.l., ex dock ton 55.00 -58.00
Mannitol, coml. fib. dms., ton-lots, works lb. .47 - —
dm. to ton lots, works lb. .50 - —
MBT (see 2-Mercaptobenzothiazole).
MBTS (see Mercaptobenzothiazyl disulfide).
Melamine, bgs., ton lots, works lb. .33 - —
500 to 2,000-lb. lots, works lb. .33½ - —
smaller lots, works lb. .38½ - —
Menadione, USP, bots. gram. .044 - .05
Menthol, nat., USP, Brazilian, cs. lb. 8.85 - 9.00
syn., USP, racemic, cns lb. 5.45 - —
Menthyl salicylate, tins lb. 4.00 - 4.25
2-Mercaptobenzothiazole, bgs., fib. dms. ton lots, works, frt. alld lb. .38 - —
less ton lots, same basis lb. .40 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots, works, frt. alld lb. .48 - —
less ton lots, same basis lb. .50 - —
Mercuric chloride, NF, cryst., dms., 50-lb. lots or more lb. 4.98 - —
gran. or powd., dms., 50-lb. lots or more lb. 4.78 - —
Cyanide, NF VIII, powd., fib. dms. lb. 6.84 - —
Iodide, red, NF, fib. dms lb. 7.72 - —
Oxide, red, NF, powd., fib. dms lb. 5.99 - 6.01
yellow, tech. (see Yellow, mercury oxide).
USP, fib. dms lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP).
Metal, 76 lb. per flask, net-flask 308.00 -315.00N
Mesityl oxide, dms., c.l., dlvd lb. .1350 - —
l.c.l., dlvd. lb. .1450 - —
tanks, dlvd. lb. .1150 - —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Choloranilina)
Metanitroaniline (see m-Nitroaniline)
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt. alld gal. .70 - —

Prices on natural methanol W. of Miss., 3c. higher.

syn., Zone 1, dms., c.l., dlvd., or truckload min., frt. alld. gal. .45 - —
l.c.l., same basis gal. .51 - —
tankwagon, 2,000-4,000-gal. lots, dlvd. Metropolitan areas. gal. .33 - —
tanks, 4,000 gal., min., frt. alld., or dlvd gal. .30 - —
4,000 gal. min., frt. equald. with Camden, N. J. gal. .27½ - —
Zone 2, dms., c.l., or truckload min., frt. alld. or dlvd gal. .48 - —
l.c.l., same basis gal. .54 - —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. Metropolitan areas gal. .36 - —
Methanol, syn., Zone 2, tanks, 4,000 gal., min., frt. alld. or dlvd gal. .33 - —

Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries, comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb. or more lb. 3.50 - —
feed grade, 98%, fib. dms., same basis lb. 2.65 - —
Methoxychlor, 50% wettable powder, dealers dms. cs. frt. alld lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .20½ - —
l.c.l., same basis lb. .21 - —
hydrogenated, non-ret. dms., c.l., dlvd. Zone 1 lb. .21 - —
l.c.l., same basis lb. .21½ - —

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss, Ala., Ga., Fla., S. C. and Tenn.

Acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .62½ - —
syn., dms., c.l., frt. alld. E gal. .57 - —
l.c.l., frt. alld. E gal. .63 - —
tanks, frt. alld. E gal. .45 - —

Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .43½ - —
t.t.l., dlvd. lb. .44½ - —
tanks, dlvd lb. .41¾ - —
Alcohol (see Methanol).
Amyl acetate, dms., c.l., dlvd. E lb. .15 - —
l.c.l., dlvd. E lb. .16 - —
tanks, dlvd. E lb. .13 - —
Ketone, dms., works lb. 1.05 - —
Anthranilate, cns. lb. 2.50 - 2.65
Benzoate, cns., dms lb. .53 - .63
Bromide, jobbers, cyls., various sizes, frt. alld. E lb. .47 - .61
Cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works, lb. .78 - —
2,000-lb. lots and more, same basis lb. .65 - —
smaller lots, frt alld. on 100 lbs lb. .89 - 1.00
standard vis., 15,400 cps.), 50-lb., c.l., alld lb. .66 - —
2,000-lb. lots and more, same basis lb. .72 - —
smaller lots, frt. alld. on 100 lbs lb. .75 - .85
Chloride, indust., cyls., frt. equald, lb. .21 - —
tanks, multi-unit, same basis, lb. .15 - —
single unit, same basis lb. .11½ - —
refrigerator mfrs., cyls., dlvd. lb. .45 - —
other consumers or service men, cyls., dlvd lb. .62 - —
Cinnamate, cns. lb. 1.43 - 1.80
Cyclohexanol, dms., c.l., works, lb. .35½ - —
l.c.l., works lb. .36 - —
tanks, works lb. .34 - —

Which "HEXA" helps you most?

HEXAMETHYLENETETRAMINE

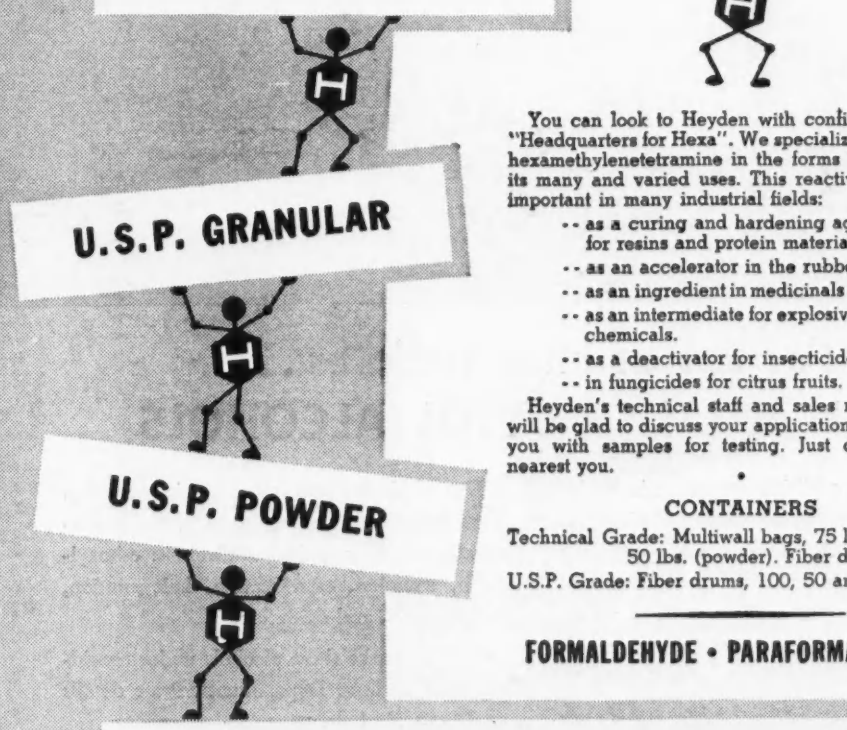
In the FORM you need
Is available from HEYDEN...

TECHNICAL GRANULAR

TECHNICAL POWDER

U.S.P. GRANULAR

U.S.P. POWDER



You can look to Heyden with confidence as your "Headquarters for Hexa". We specialize in producing hexamethylenetetramine in the forms best suited for its many and varied uses. This reactive chemical is important in many industrial fields:

- as a curing and hardening agent for resins and protein materials.
- as an accelerator in the rubber industry.
- as an ingredient in medicinals and solid fuels.
- as an intermediate for explosives and organic chemicals.
- as a deactivator for insecticide carriers.
- in fungicides for citrus fruits.

Heyden's technical staff and sales representatives will be glad to discuss your application and to supply you with samples for testing. Just call the office nearest you.

CONTAINERS

Technical Grade: Multiwall bags, 75 lbs. (granular); 50 lbs. (powder). Fiber drums, 100 lbs.
U.S.P. Grade: Fiber drums, 100, 50 and 25 lbs.

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Chemical Progress Week, May 16-21

Methyl Ethyl Ketone—a-Nitronaphthalene

Methyl ethyl ketone, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd lb. .14 - —
tanks, dlvd lb. .11 - —
Formate, refd., dms. lb. .35 - .40
tech. non-ret. dms. any quantity, works lb. .10 - —
Heptin carbonate, bots lb. 33.00 - 42.00
p-Hydroxybenzoate, fib. dms lb 1.90 - 2.00
Ionone, standard, cns., dms lb. 6.10 - 6.30
Isobutyl carbinol, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .13 - —
Ketone, dms., c.l., dlvd lb. .15 - —
l.c.l., dlvd. lb. .16 - —
tanks, dlvd. lb. .13 - —
Methacrylate, dms., c.l., t.l. frt. equald with Belle, W. V. lb. .36½ - —
smaller lots, same basis lb .37 - —
tanks, same basis lb. .35 - —
Naphthyl ketone, cryst., cns lb. 3.60 - 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Roseaniline chloride, NF fib. dms., 5-lb. lots lb. 5.64 - —
Salicylate, USP, cns., 500-lb. lots lb. .53 - —
Testosterone, USP, 100-gram bots. gram. .68 - —
2-Methylbenyzlamine, dms., l.c.l., works lb. 1.25 - —
2-Methyl-5-ethyl pyridine dms., c.l., works lb. .47½ - —
l.c.l., works lb. .48 - —
tanks, works lb. .46 - —
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb 3.25 - 3.60
smaller lots, same basis lb. 3.40 - 3.60
Methylene chloride, tech., dms., c.l., dlvd. E lb. .13½ - —
l.c.l., same basis lb. .14½ - —
tanks, same basis lb. .12½ - —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .80 - —
Methylparaben (see Methyl p-hydroxybenzoate).
Methylpentanediol (see Hexyleneglycol).
Methylphenylpyrazolone (see 1-Phenl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04¼ - —
roofing, 20 to 80 mesh, works lb. .03 - .04
wet-grd., biotite, bgs. c.l., works, frt. alld. E lb. .06¼ - —
l.c.l., ex-whse. or frt. alld. E lb. .07 - —
paint, or lacq., bgs., c.l., works, frt. alld. lb. .07¾ - —
l.c.l., ex-whse. or frt. alld. E lb. .08½ - —
rubber, bgs., c.l., works, frt. alld. E lb. .07½ - —
l.c.l., ex-whse. or frt. alld. E lb. .08½ - —
wallpaper, bgs., c.l., works, frt. alld., E lb. .07¾ - —
l.c.l., ex-whse. or frt. alld. E lb. .08¼ - —
white, extra, fine, bgs., c.l., works, frt. alld. E lb. .07¾ - —
l.c.l., ex-wnse. or frt. alld. E lb. .08½ - —
Mica, wet-grd. W. of Miss R. ½c. higher. W. of Rockies, 1c. higher.

Milk powder, non-fat, roller, bgs., c.l. lb. .12 - .15½
spray, bgs., c.l. lb. .14 - .16½
whole, roller, bgs., c.l. lb. No prices.
spray, bgs., c.l. lb. .27 - .31
Sugar (see Lactose).
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .10 - .10½
New York gal. .12 - —
Molybdenum (metal), powd., 80 or 200 mesh, cns., works kilo. 8.80 - —
Trioxide, pure, kgs., works lb. 1.05 - —
tech., kgs., works, basis Mo. content lb. 1.25 - —
Monobutylamine, dms., c.l., E. of Rockies lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Monochlorobenzene dms. c.l., frt. alld. or dlvd. E lb. .10 - —
l.c.l., same basis lb. .11 - —
tanks, same basis lb. .08½ - —
Monoethanolamine, dms., c.l., dlvd. E lb. .27 - —
l.c.l., same basis lb. .28 - —
tanks, same basis lb. .25 - —
Monoethylaiphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% contained amine, dms., c.l., dlvd E lb. .33 - —
l.c.l., dlvd. E lb. .34 - —
tanks, dlvd. E lb. .31 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylortnotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27 - —
l.c.l., same basis lb. .28 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, dms., c.l., dlvd. lb. .30½ - —
l.c.l., same basis lb. .31½ - —
tanks, same basis lb. .32½ - —

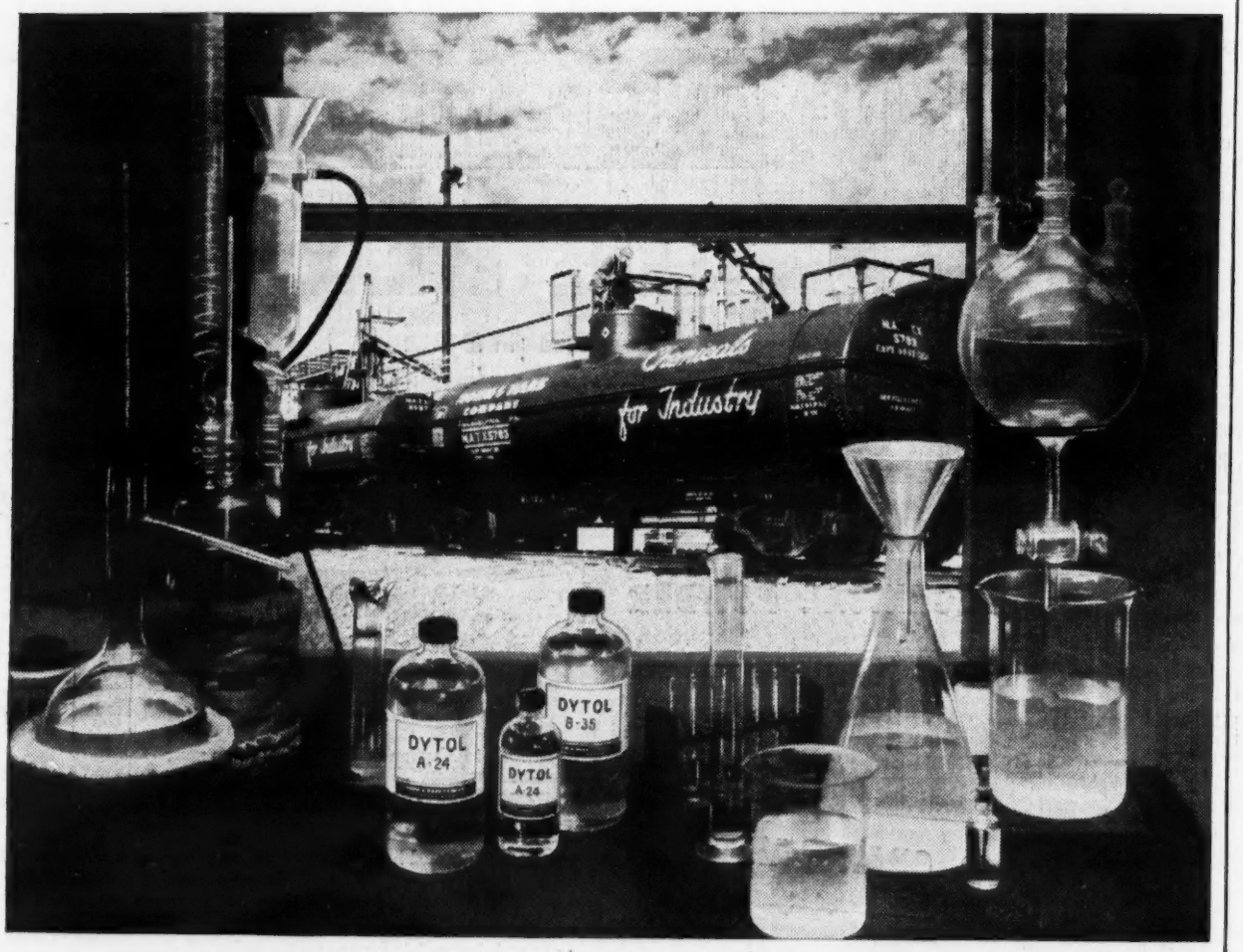
Monomethylamine, 30-35% soln., dms., c.l., frt. equald., 100% basis. lb. .40 - —
l.c.l., frt. equald, 100% basis. lb. .40½ - —
tanks, frt. equald, 100% basis. lb. .31 - —
40% soln., dms., c.l., frt. equald. 100% basis lb. .37 - —
l.c.l., frt. equald, 100% basis. lb. .37½ - —
tanks, frt. equald., 100% basis. lb. .31 - —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol).
Morphine, cns. oz. 12.40 - 12.60
Acetate, anhyd., cns. oz. 9.95 - 10.00
Hydrobromide, cns. oz. 9.90 - 9.95
Hydrochloride, NF, cns. oz. 9.90 - 9.95
Sulfate, USP, cns. oz. 9.90 - 10.05
Morpholine dms., c.l., dlvd. E lb. .54¾ - —
l.c.l. dlvd. E lb. .55¾ - —
tanks, dlvd. E lb. .52¾ - —
Musk, syn., ambrette, 100-lb. lots, fib. dms lb. 5.15 - —
25-lb lots, cns lb. 5.20 - —
5-lb. lots, cns lb. 5.30 - —
ketone, 100-lb. lots, fib. dms lb. 5.30 - —
25-lb lots, cns lb 5.35 - —
5-lb. lots, cns lb. 5.45 - —
xylol, 100-lb. lots, fib. dms lb. 1.40 - —
25-lb lots, cns lb. 1.45 - —
5 lb. lots, cns lb. 1.50 - —
Mustard seed, Danish, yellow, bgs lb. .12 - .12½
Dutch, yellow, bgs lb. No prices.
English, yellow, bgs lb. .12½ - 14
Montana, oriental, bgs. lb. No prices.
yellow, bgs. lb. .12½ - .13
Myrobalans, J-1, assorted, bgs., ex dock ton. 66.00 - —
crushed, bgs., ex dock ton. 78.00 - 80.00
Bombay, bgs., ex dock ton. 60.00 - —
extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .07¾ - —

N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S).
Naphthalene, crude, dom., 74° tanks, frt. equald lb. .05½ - —
78°, bgs., c.l., same basis lb. .06¾ - —
l.c.l., same basis lb. .07 - —
tanks, same basis lb. .06¼ - —
imp., 78°, large lots lb. .06¾ Nom.
refd., dms., indust., chipped or or crushed, bgs., frt. equaled lb. .11½ - —
flake, bgs., same basis lb. .12½ - —
tanks, same basis lb. .10¾ - —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .13¾ - —
cs., 50 lbs., c.l., same basis lb. .14 - —
1-lb. pkgs. c.l., same basis lb. .16¼ - —
a-Naphthol, bbls., frt. alld lb. 1.00 - —
b-Naphthol, tech., bbls., c.l., works. lb. .34½ - —
l.c.l., works lb. .36½ - —
Benzoate, fib. dms., works lb. 3.00 - —
custom contract, works lb. 1.65 - —
Salicylate, dms. lb. 5.00 - —
Sulfate, cns. lb. 35.00 - —
a-Naphthylamine, bbls., frt. alld lb .50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin, fib. dms., 100-kilo lots, basis, activity gram. .60 - —
1-kilo lots, basis, activity gram. 1.20 - —
Nerolin, cns. lb. 2.35 - 2.65
Niacin (see Acid, nicotinic).
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .77 - .90½
Carbonate, bbls., dlvd. lb. .73¾ - .81¾
Chloride, bbls., dlvd. lb. .38½ - .46½
Formate, bbls., ton lots, frt. alld. lb. .68 - .69
Metal, electro cathodes, cs., works. lb. .64½ - —
Nitrate, bbls., works lb. .37 - .38
Oxide, black, bbls. lb. .76 - —
green, bbls. lb. .76 - —
Sulfate, bgs., c.l., dlvd. lb. .30¼ - —
l.c.l., dlvd. lb. .31¼ - .38¼
Nicotinamide, USP, dms., frt. adjusted kilo. 12.00 - 12.30
Hydrochloride, dms., frt. adjusted. kilo. 11.50 - 11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld. lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld lb. 1.03 - —
Niger seed, bgs. lb. .10 - .10½
Nikethamide, cbys. lb. 5.00 - —
m-Nitroaniline, dms., frt. alld lb. 1.05 - —
o-Nitroaniline, flaked, dms. lb. .54 - .57
powd., dms. lb. .60 - —
p-Nitroaniline, dms., l.c.l., frt. alld. lb. .51½ - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .12 - —
l.c.l., frt. alld. lb. .13 - —
tanks, frt. alld lb. .11 - —
o-Nitrobiphenyl, tech., dms., c.l., works lb. .14½ - —
l.c.l., works lb. .15 - —
tanks, works lb. .13 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
l.c.l., same basis lb. .35 - .37
18-25 cps., bbls., c.l., same basis lb. .36 - —
l.c.l., same basis lb. .37 - .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 - —
l.c.l., same basis lb. .40 - .42
spirit-soluble, 30-35 cps., ¼, ½, sec., bbls., c.l., same basis lb. .41 - —
l.c.l., same basis lb. .42 - .44
5-6 cps., 40-60 secs., bbls., c.l., same basis lb. .40 - —
l.c.l., same basis lb. .41 - .43

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms., c.l. lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-4-chlorophenol, dms. lb. .75 - —
Nitroethane, dms., dlvd. E of Rockies lb. .25 - —
Nitrogen solution, 37-40% N, tanks, frt., equald., 100% basis. ton. 130.00 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.10 - 4.50
Sewage sludge, bulk, works unit-ton. 2.95 + .50
Nitromethane, dms., l.c.l., dlvd E. of Rockies lb. .25 - —
a-Nitronaphthalene, bbls, frt. alld. lb. .41 - —



For use as intermediates . . .
HIGH QUALITY DYTOL ALCOHOLS

Are you making additives for cosmetics, polymerization regulators, or textile finishing and softening agents? Are you making quaternary ammonium compounds or emulsifiers and detergents? Are you making *anything* which requires a fatty alcohol? If you are using such an alcohol, or are just in the planning stage, you will find it profitable to check the DYTOL alcohols listed here.

DYTOL alcohols are available in quantity. They are of high, uniform quality, and undergo the reactions typical of alcohols: ethoxylation, sulfation, esterification, halogenation, dehydration, and oxidation.

Why not take these alcohols under consideration? Write to Department SP for details on DYTOL alcohols.

	Dytol A-24	Dytol B-35	Dytol E-46
% Decyl (C_{10})	2.0	2.5	none
% Lauryl (C_{12})	70.0	62.0	none
% Myristyl (C_{14})	26.0	24.0	4.0
% Cetyl (C_{16})	2.0	11.0	34.0
% Stearyl (C_{18})	none	0.5	62.0

DYTOL *is a trademark, Reg. U. S. Pat. Off. and in principal foreign countries.*

CHEMICALS FOR INDUSTRY

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Representatives in principal foreign countries

Nitropropane 1, dms., dlvd. E. of Rockies..lb. .23¼- —
2, dms., dlvd. E. of Rockies...lb. .25 - —
tanks, works.....lb. .22¼- —
o-Nitrophenol, dms., works, frt. equald..lb. .94 - —
p-Nitrophenol, dms., works, frt. equald..lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld.lb. .10 - —
l.c.l., frt. alld.....lb. .11 - —
tanks, frt. alld.....lb. .09 - —
p-Nitrotoluene, dms., works.....lb. .33 - .36
m-Nitro-p-toluidine, dms.....lb. 1.59 - —
Nitrous ether, conc., bots 100-lb. lots..lb. 1.28 - 1.35
Nonyl phenol, dms., c.l., frt. alld. .lb. .26 - —
l.c.l., frt. alld.....lb. .27 - —
tanks, frt. alld.....lb. .24 - —
Nutgalls, Aleppo, bgs.....lb. .36 - .38
Chinese, bgs.....lb. No prices.
Nutmeg, East Indian, bgs.....lb. .39 - .40
West Indian, bgs.....lb. .32 - —
Nux vomica, bls.....lb. .10 - .12
powd., bbls., bxs.....lb. .15 - .17

O

Octane, indust., tanks, Bayonne, N. J. gal. .19 - —
Baytown, Tex.....gal. .15¾- —
Borger, Tex.....gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd..lb. .35 - —
l.c.l., dlvd.....lb. .37 - —
tanks dlvd.....lb. .32½- —
Octyl phenol, bgs., c.l., works..lb. .23¼- —
l.c.l., works.....lb. .23¾- —
tanks, works.....lb. .22½- —
Drum prices for octyl phenol are 1c. higher.

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers' views.)

Oil, abies, siberica, cns.....lb. 3.00 - 3.50
Almond, artif., bitter (see Benzaldehyde).
nat., bitter, F.P.A., bots....lb. 3.00 - 3.75
NF, bots.....lb. 3.25 - 3.75
sweet, USP, dms., cns.....lb. .65 - .80
Allspice (see Oil, pimento).
Amyris, dms.....lb. 1.40 - 1.95
Angelica root, bots.....lb. 66.00 -100.00
seed, bots.....lb. 56.00 -95.00
Aniline (see A).
Anise, USP, dms.....lb. 3.50 - 5.00
Apricot, kernel, USP, dms.....lb. .38 - .45
Avocado, cns.....lb. 3.25 - —
Babassu, crude, tanks.....lb. .15¼- —
Bay, NF, Puerto Rican, 50-55%, cns..lb. 1.85 - 2.20
55-60%, cns.....lb. 2.10 - 2.50
West Indian, 50-55%, cns., dms..lb. 1.85 - 2.40
Bergamot, nat., NF, Italian, cns.lb. 9.25 -11.00
Birchtar, crude, cns.....lb. 1.50 - 1.90
rectified, NF, cns.....lb. 1.75 - —
Bois de rose, Brazil, dms.....lb. 4.80 - 6.00
Mexican (see Oil, lignaloe wood).
Bone, dms., works.....lb. .63 - .70
Cajeput, native, cns.....lb. 1.75 - 2.10
redist., USP, cns.....lb. 2.25 - 3.00
Calamus, bots.....lb. 12.00 -20.00
Camphor, sassafrassy, dms.....lb. .40 - .60
white, dms.....lb. .35 - .50
Cananga, native, cns.....lb. 7.85 -10.25
rectified, cns.....lb. 12.50 -14.75
Caraway, NF, cns.....lb. 3.75 - 5.00
Capsicum (see Capsicum oleoresin).
Cardamom, NF, bots.....lb. 35.00 -50.00
Cassia, USP (see Oil, cinnamon, USP).
Castor blown, dms., c.l.....lb. .1950- —
l.c.l.....lb. .2000- —
dehydrated, bodied, dms., c.l.lb. .2160- —
l.c.l.....lb. .2210- —
tanks.....lb. No prices.
unbodied, dms., c.l.....lb. .2010- —
l.c.l.....lb. .2060- —
tanks.....lb. No prices.
hydrogenated, bgs., c.l., dlvd.lb. .20½- —
bgs., l.c.l.....lb. .24 - —
No. 3, tech., dms., c.l.....lb. .1475- —
l.c.l.....lb. .1525- —
tanks.....lb. No prices.
No. 1, Brazilian, tanks.....lb. .12½- —
sulfonated, 50%, dms., l.c.l..lb. .11½- .12
75%, dms., l.c.l.....lb. .14½- .15
USP, dms., c.l.....lb. .1700- —
l.c.l.....lb. .1750- —
tanks.....lb. No prices.
refd. and deodorized, dms., c.l..lb. .1850- —
l.c.l.....lb. .1900- —
tanks.....lb. No prices.
Cedarleaf, cns., dms.....lb. 2.90 - 3.50
Cedarwood, cns., dms.....lb. .95 - 1.65
Celery seed, bots.....lb. 12.50 -20.00
Chamomile, blue, Hungarian bots.lb. 170.00 -280.00
Chinawood (see Oil, tung).
Cinnamon bark, bots.....lb. 25.00 -65.00
leaf, cns.....lb. 1.75 - 2.25
USP cns., dms., (Cassia).....lb. No stocks.
Citronella, Ceylon, cns., dms..lb. 1.10 - 1.70
Java, true, dms.....lb. 1.75 - 2.00
Java-type, cns.....lb. 1.80 - 2.50
Clove, bud, USP, cns., dms.....lb. 3.25 - 4.20
leaf, unrectified, dms.....lb. 1.30 - 2.00
Coconut, crude, tanks, N. Y...lb. .12¼- —
Pac. Coast.....lb. .11 - —
refd., Cochin type, tax incl. ret. dms., l.c.l...lb. .19½- —
deodorized, tax incl., non-ret. dms., c.l..lb. .21½- —
Cod, Newfoundland, dms.....lb. .11 - —
Codliver, USP, dms.....gal. 1.50 - 1.60
Copaiba, cns.....lb. 1.50 - 2.50
Coriander, USP, bots.....lb. 11.75 -17.50
Corn, crude, tanks, works....lb. .14 - —
foots (soapstock), acid 95%, tanks, N. Y..lb. .05¼- —
refd., salad, dms.....lb. .19 - .19¼
tanks.....lb. .17½- —
Costus, bots.....lb. 8.00 - —
Cottonseed, crude, tanks, South-East..lb. .13¾- —
Valley.....lb. .13⅜- .13¾
Texas.....lb. .13¼- .13½
foots (soapstock), acid, 95%, tanks, N. Y..lb. .04¾- —
raw, 50%, tanks, same basis.lb. .02¼- —
refd., salad, dms.....lb. .18¾- .19
tanks.....lb. .17¼- —
Creosote (see Creosote, coaltar).
Crude (see Petroleum, crude).
Cubeb, cns.....lb. 4.50 - 6.25
Cumin, bots., cns.....lb. 4.15 - 5.75
Cypress, bots.....lb. 5.50 - —
Degras (see D).
Dillseed, bots.....lb. 2.80 - 4.25
Dillweed, dom., bots., dms.....lb. 3.75 - 5.30
Dip (see D).
Erigeron, cns.....lb. 5.50 - 7.50
Eucalyptus, NF, rectified, 70-80%, dms..lb. .67 - 1.00
80-90%, dms.....lb. .85 - 1.25
Fennel, sweet, USP, cns.....lb. 2.30 - 3.25
Fir, Canada, cns.....lb. 2.35 - 3.00
Fish, refd., alkali, dms.....lb. .1300- .1350
kettle-bodied, dms.....lb. .1530- .1580
light-pressed, dms.....lb. .1150- .1200
tanks.....lb. .1000- —

Oil, fishliver, crude, for feeds or concentrating, 4,000 to 12,000 A units per gram, dms., 1,000,000 units. .08 - .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units. .09 - .10
25,000 to 35,000 A units per gram, dms., 1,000,000 units. .09 - .10
40,000 to 55,000 A units per gram, dms., 1,000,000 units .10½- .11
100,000 A units per gram., dms..1,000,000 units. .12 - .14
200,000 A units per gram., dms..1,000,000 units. .12 - .14
300,000 A units per gram, dms. 1,000,000 units. .12 - .14½
400,000 A units per gram, dms., 1,000,000 units.. .12 - .14½
500,000 A units per gram., dms..1,000,000 units. .12 - .14½
Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.
Fusel (see F).
Garlic, pure, bots.....oz. 6.50 - 9.50
Gaultheria (see Oil, wintergreen).
Geranium, Algerian, cns.....lb. 11.50 -14.00
Bourbon, cns.....lb. 11.75 -14.50
Turkish (see Oil palmarosa)
Ginger, dist., bots.....lb. 16.50 -20.00
Grapefruit, dms.....lb. 2.50 - 3.25
Grease, No. 1, dms.....lb. .13¾- .14
extra, winter, strained, dms..lb. .17 - .17½
prime, burning, dms.....lb. .18½- .19
Guaiacwood, cns.....lb. 1.40 - 1.90
Hemlock, cns.....lb. 2.10 - 2.50
Juniper berry, NF, VIII, bots..lb. 2.75 - 4.00
twice rectified, bots.....lb. 3.60 - 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns.....lb. .42 - .65

Oil, lard (see Oil, grease).
Laurel leaf, dms., cns.....lb. 9.75 -12.50
Lavandin, dms., cns.....lb. 2.70 - 4.85
Lavender, flower, USP, French, 30-32% ester, cns.....lb. 3.55 - 4.60
38-40% ester, cns.....lb. 9.50 -13.20
40-42% ester, cns.....lb. 10.00 -16.50
Spike, Spanish, cns.....lb. 1.85 - 2.30
Lemon, USP, Calif., cns., dms..lb. 4.75 - 6.15
Messina, cns.....lb. 4.85 - 9.80
terpeneless, bots.....lb. 32.00 -85.00
Lemongrass, cns., dms.....lb. 2.00 - 2.80
Lignaloe wood, Mex., cns.....lb. 2.70 - 4.60
Lime, dist., Mexican, cns.....lb. 3.30 - 4.75
West Indian, cs.....lb. 3.30 - 4.75
expressed, West Indian, cns..lb. 7.00 - 8.00
terpeneless, bots.....lb. 29.50 -100.00
Linseed, raw, dms., c.l., N. Y..lb. .1375- —
tanks, f.o.b. Minneapolis..lb. .1300- —
New York.....lb. .1435- —
tankwagon, New York....lb. .1455- —
Boiled linseed oil, .006c. per lb. higher
Mace, dist., cns., dms.....lb. 2.75 - 3.60
Mandarin (see Oil, tangerine).
Menhaden, crude, tanks, works, Atlantic Coast..lb. .08¼ Nom.
Gulf and Atlantic ports, f.a.s..lb. .07¾- —
Mineral, white (see Oil, white mineral).
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms.....lb. .18 - —
syn., bots.....lb. 1.60 - 1.85
Neatsfoot, 15° cold test, dms..lb. .33 - .34
20° cold test, dms.....lb. .32 - .33
30° cold test, dms.....lb. .30 - .31
Neroli, NF, French, bots.....lb. 35.00 -275.00
Spanish, bots.....lb. 35.00 -85.00

Nitropropane—Oil, Petitgrain

Oil, nutmeg, USP, dist., East Indian, cns., dms..lb. 3.00 - 4.50
West Indian, cns., dms..lb. 2.85 - 3.60
Ocotea, cymbarum, dms.....lb. 1.00 - 1.50
Oiticica, liquid, dms.....lb. .13½- .13¾
tanks.....lb. .12 - .12¼
Oleo, extra, dms.....lb. .15¾- .16
Olibanum, bots.....lb. 5.50 - 7.65
extra fine, bots.....lb. 8.00 - —
Olive, edible, Spanish, dms., duty paid..gal. 2.30 - 2.40
Tunisian, same basis....gal. 2.15 - 2.20
Orange, sweet, dist., cns.....lb. .50 - .80
expressed, USP, Brazilian, cns., dms..lb. No stocks.
Calif., cns., dms.....lb. .55 - 1.25
Florida, cns., dms.....lb. .45 - 1.25
Messina, cns.....lb. 3.85 - 5.35
West Indian, cns., dms..lb. 2.50 - 2.65
sesquiterpeneless, bots.....lb. 65.00 -120.00
Origanum, Spanish, cns.....lb. 1.75 - 2.85
Palm, clarif., dms.....lb. .12¾- .13¼
kernel, denat., tanks.....lb. .12 - —
Palmarosa, cns.....lb. 8.00 - 9.50
Paraffin, pale, 100-110 vis., at 100 F, tanks, East Coast refy..gal. .14 - —
Patchouli, dms.....lb. 8.00 - 9.50
Peach kernel, USP (see Oil apricot kernel).
Peanut, crude, tanks, f.o.b. mills.lb. .18 - —
refd., dms.....lb. .22½- .23
tanks.....lb. .21 - —
Pennyroyal, USP, imported, cns.lb. 2.50 - 3.10
Peppermint, nat., dms.....lb. 7.50 - 8.90
redist., USP, dms.....lb. 7.85 - 9.50
Persic, USP (see Oil, apricot kernel).
Petitgrain, South American, cns., dms..lb. 3.80 - 5.30

How does the champion get to be champion?

By being better! Unmatched through the years is the *California flavor* that distinguishes Exchange Brand Oil of Lemon. That's why Exchange remains the overwhelming sales leader—in fact, the *4-to-1 favorite* over all other lemon oils combined!

So why skimp on quality...Insist on Exchange quality and flavor that come *only* from genuine California lemons, grown and skillfully processed by Sunkist Growers.

Sunkist Growers
PRODUCTS DEPARTMENT • ONTARIO, CALIFORNIA

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76 Ninth Ave., New York 11, N.Y.
DODGE & OLCOTT, INC.
180 Varick St., New York 14, N.Y.

Exchange®
OIL OF LEMON U. S. P.

Oil, Pimento—Pepper

Oil, Pimento, berry, NF, dms. lb. 4.20 - 5.00
leaf, cns. lb. 2.60 - 3.10
Pine, dest.-dist., dms., l.c.l., works. lb. .11¼- —
ex-whse. lb. .1355- —
steam dist. dms. ex whse. N.Y.C lb. .163 —
Pineneedle Siberian (see Oil, abies siberica).
Rapeseed, tankcars lb. .16 - —
Red (see Acid oleic).
Rice, bran, clarif., dms., l.c.l. lb. .16 - —
tanks, dlvd. E lb. .14 - —
Rose, nat., Bulgarian, bots oz. 43.50 -62.25
Rosemary, Spanish, USP, cns., dms lb. .60 - 1.00
tech., cns., dms lb .50 - 70
Rue, bots. lb 2.00 - 2.50
Safflower, dms., c.l., Atl. coast lb. .1910- —
tanks, same basis lb. .1760- —
Sage, clary bots lb 20.00 -25.00
Dalmatian, cns. lb. 4.75 - 6.00
Spanish, cns. lb 1.15 - 1.40
Sandalwood, NF, cns lb. 13.00 -14.50
Sardine, crude, tanks, Pac. coast. lb. .09 Nom.
Sassafras, artif., dms lb. .98 - 1.40
nat., Brazilian (see Oil ocotea cymbarum).
dom., USP, cns., dms lb 1.75 - 2.20
Savin, cns. lb. 2.75 - —
Savory, cns lb. 4.25 - —
Sesame refd. dms lb. .30 - .37
Shingle stain, tar distillate, dms., c.l., works gal. .35 - —
l.c.l., works gal. .44 - —
tanks, works gal. .23 - —
Snakeroot, Canada, cns. lb. 28.50 - 31.00
Soybean, crude, tanks, Decatur lb. .11¼- —
foots (soapstock), acid 95%, tanks, N. Y. lb. .06½- —
raw, 50%, tanks, N. Y. lb. .02½- —

Oil, soybean, refd., alkali, dms lb. .15⅞- .16¼
tanks lb. .14⅜- —
clarified, dms. lb. .15⅜- .15⅞
tanks lb. .13⅞- —
salad, dms. lb. .16⅜- .16¾
tanks lb. .14⅛- —
Spearmint, USP, dms lb. 4.25 - 5.50
Sperm, bleached winter, 45° dms. lb. .1625- .1650
tankcars lb. .1450- —
nat. winter, 45°, dms lb. .1525- .1550
tankcars lb. .1350- —
Spruce, cns., dms lb. 2.10 - 2.75
Sweet birch, USP, Northern, cns. lb 4.25 9.50
Southern, cns lb 2.50 3.00
Tall, crude, dms., c.l., works lb. .03½- —
tanks, works lb. .02½- —
dist., dms., c.l., works lb. .07½- —
l.c.l., works lb. .07¾- —
tanks, works lb. .06¼- —
refd., dms., c.l., works lb. .06½- .06¾
l.c.l., works lb. .06¾- .07¾
tanks, works lb. .05¼- .05¾
Tallow, acidless, dms lb. .12 - .12½
Tangerine, Floridian, dms lb. 2.00 - 2.80
Tansy, dms. lb 7.75 - 9.00
Tar Acid (see T's).
Pine, coml., dms., c.l., works lb. .528 - .538
l.c.l., works lb. .601 - —
whse. lb. .712 - —
tanks, works lb. .427 - .438
rectified, NF, dms., incl., l.c.l., works, South lb. .77 - —
whse., N.Y.C. lb. .87 - —
Theobroma (see Cocoa butter).
Thyme, NF red, cns., dms lb. 1.70 - 3.75
white, cns lb. 1.95 - 4.00
tech., white, cns lb. .40 - 1.85

Oil, tung, dms., c.l., N. Y. lb. .24⅞- —
l.c.l., same basis lb. .25¼- .25½
tanks, N. Y. lb. .23¾- .23½
domestic mills lb. .22½- —
Turkey red (see Oil, castor, sulfonated).
Turpentine, NF, cns., dms. lb. .38 - .45
Vetiver, Bourbon, cns lb. 13.25 -17.00
Haitian, cns. lb. 11.00 -17.50
Java, cns. lb. 22.50 -40.00
Wheat, germ., 5-gal. dms gal. 10.00 -13.00
White mineral, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. N. Y. gal. .51¼- .54¼
65-75 vis., non-ret., dms., c.l., same basis gal. .52½- .55
l.c.l., same basis gal. .57½- .58½
80-90 vis., non-ret., dms., c.l., same basis gal. .53½- .56½
l.c.l., same basis gal. .58½- .59½
125-135 vis., non-ret., dms., c.l., same basis gal. .59½- .62½
l.c.l., same basis gal. .64½- .65½
145-155 vis., non-ret., dms., c.l., same basis gal. .66 - .68½
l.c.l., same basis gal. .71 - .71½
175-185 vis., non-ret., dms., c.l., same basis gal. .69½- .73
l.c.l., same basis gal. .74½- .75
USP, 200-210 vis., non-ret., dms., c.l., same basis gal. .73½- .75
l.c.l., same basis gal. .77½- .78
345-355 vis., non-ret., dms., c.l., same basis gal. .83 - .85
l.c.l., same basis gal. .83 - .85
Wintergreen, USP, nat., Northern, cns. lb. 6.35 -10.30
Southern, cns lb. 3.20 -19.50
synthetic (see Methyl salicylate).
Wood (see Oil, tung).
Wormseed, cns. lb. 4.00 - 5.00
Wormwood, cns. lb. 5.00 - 6.85
Ylang-ylang, Bourbon, bots. lb. 17.00 -30.00
extra, bots lb. 28.00 -40.00
Madagascar, bots lb. No stocks

Oleostearine, bbls. lb. .11¼- .11⅛
Maroon toner, MNPT, kgs., works.
Opium, USP, cns lb. 19.20 -19.45
gran., USP, cns. lb. 21.65 -21.90
powd., USP, cns lb. 21.65 -21.90
Orange cadmium lithopone, bbls., frt. alld. E. of Rockies lb. 1.56 - —
Chrome, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .31 - —
Chrome orange prices are ½c. higher, dlvd. Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.
Dinitroaniline toner lb. 1.30 - —
Mineral, American, bbls., l.c.l., works lb. .2035- .2060
Molybdated, bbls lb. .45 - —
o-Nitroaniline toner, kgs lb. 1.15 - —
Orange peel bitter, Haitian, bls lb. .14 - .16
sweet, bls lb. .16 - .18
Orris root Florentine, bls lb. .45 - .50
powd., bbls., bxs lb. .50 - .53
Verona, bls lb. .35 - .40
powd., bbls., bxs lb. .40 - .45
Orthoaminobiphenyl (see o-Aminobiphenyl).
Orthoanisidin (see o-Anisidine).
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl).
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthopehenetidin (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine).
Osage orange, cryst., No. 1, bbls., l.c.l lb. .40 - —
extract, liq., No. 1, bbls., l.c.l lb .19 - —
Ouabain, USP, bots gram. 3.00 - 4.00
Oxyquinolin sulfate, cns., 100-lb. lots, works lb. 4.75 - 5.00
smaller lots, works lb. 4.92 - 5.17

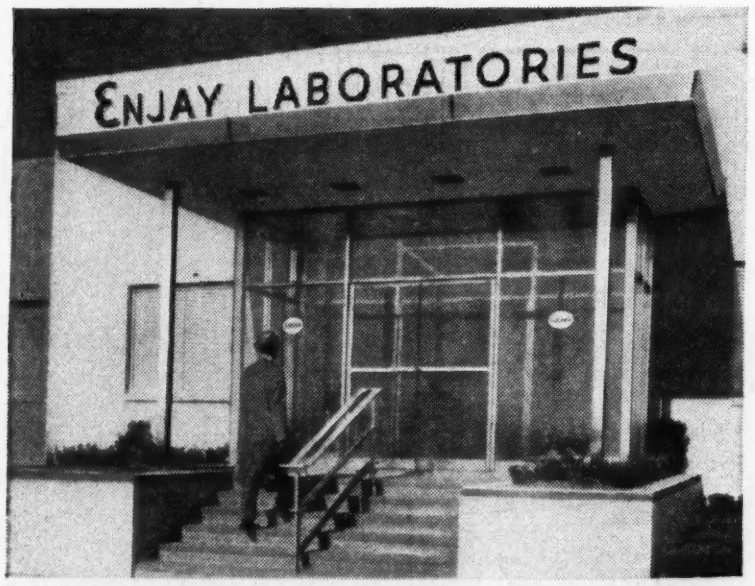
P

Pancreas substance, assay 1:75 bots., 5-lb. lots or more lb 4.00 - —
Pancreatin, USP, bots lb. 1.90 - 2.10
Papain, USP, African, bots lb. 4.00 - 4.50
Ceylon lb. 3.00 - 3.50
Papaverine, nat. or syn. hydrochloride, USP, cns., 25 oz. to 100 oz. lots oz. 5.00 - —
smaller lots oz. 5.05 - 5.20
Sulfate, cns. oz. 7.10 - 7.35
Paprika, Roumanian, bgs. lb. .28 - —
Spanish, bgs. lb. .35 - .37
Yugoslavian, bgs lb. .36 - —
Para-aminophenol (see p-Aminophenol).
Para-anisidin (see p-Anisidine).
Parachloranilin (see p-Chloroaniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachloro-orthonitroanilin (see 4-Chloro-2 nitroaniline).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude scale white, 121°-123°F, ASTM, solid, c.l., refy lb. .0710- —
fully refd., 122°-124°F, ATSM, slabs loose, c.l., refy lb. .0845- —
125°-127°F, ASTM, slabs loose, c.l., refy lb. .0845- —
130°-132°F., ASTM, slabs loose, c.l., refy lb. .0855- —
132°-134°, ASTM, slabs, loose, c.l., refy lb. .0855- —
135°-137°F., ASTM, slabs loose, c.l., refy lb. .0855- —
Prices for paraffin in bags and ctns., c.l. 7/10c. per lb. higher; 1,000 to 9,999 lbs., 2.7c. per lb. higher and under 1,000 lbs. 3.7c. per lb. higher.
AMP temperatures are an arbitrary 3°F. higher than ASTM.
Paraformaldehyde, 91% flake, bgs., c.l., frt. alld lb. .10½- —
l.c.l., frt. alld lb. .12½- .13¼
powd., bgs., c.l., frt. alld lb. .15½- —
l.c.l., frt. alld lb. .17 - —
USP X, fib, dms., c.l lb. .183 - —
1,000-lb. lots lb. .193 - —
smaller lots lb. .208 - —
Paraldehyde, tech., 98%, 55-gal. dms., c.l. works lb. .13½- —
l.c.l., works lb. .14½- —
tanks, works lb. .11½- —
Paranitroaniln (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrophenol (see p-Nitrophenol).
Paranitrotoluene (see p-Nitrotoluene).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15% dealers, dms., works lb. .50 - .53
tech., dms., c.l., t.l., works lb. 1.3395- —
l.c.l., works lb. 1.51 - —
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paratoluidine (see p-Toluidine)
Paris green, dealer, distributor, dms., c.l., works, frt. alld. on 96 lbs. or over lb. .36 - .40
l.c.l., same basis lb. .37 - .53
Passion flower herb, bls lb .20 - .21
Peanut meal, 45%, old process, bgs., mills ton. 78.00 Nom.
Pectin, citrus, NF, powd., bbls lb. 2.05 - 2.06
tech., powd., bbls lb. 1.50 - —
imported, Danish, ex whse lb. 1.28 - —
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units. .05 - .06
Procaine bulk 1,000,000 units. .05 - .06
Sodium, sterile, bulk, 1,000,000 units. .05 - .06
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .21 - —
l.c.l., same basis lb. .22½- .29
Pentaerythritol, tech., bgs., c.l., works lb. .32 - —
l.c.l., works lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, industrial, tanks, Tex. refy gal. .14¼- —
Pepper, black, Malabar, spot, bgs lb. .49 - .50
red, Gondar, spot, bgs lb. .28 - .30
Japanese, hontaka, bgs lb. .30 - .31
birdseyes, bgs., new crop lb. .51 - .52
Mombasa, bgs., shipt lb. .66 - .68
Nigerian, bgs. lb. .31 - .32
Turkish, bgs. lb. .19 - —
white, bgs lb. .57 - .58

Announcing the NEW

ENJAY LABORATORIES

—another milestone of service to industry



The first section of the new Enjay Laboratories, at Linden, New Jersey, houses 12 laboratories and 14 offices in this modern cement-brick structure.

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ENJAY

35 successful years of leadership in serving industry

ENJAY COMPANY, INC., 15 West 51st Street, New York 19, N. Y. Other Offices: Akron • Boston • Chicago • Tulsa

Peppermint leaves, USP, dom., bls., dms	lb.	.70	.75
imp., bls	lb.	1.25	—
Pepsin, NF, 1:3,000 bulk	lb.	3.45	3.50
Perchloroethylene, dms., c.l., or truckloads, dlvd. E	dm.	85.00	—
dlvd. W	dm.	88.50	—
t.c.l., dlvd. E	dm.	95.00	—
dlvd., W	dm.	98.50	—
tanks, dlvd. E	lb.	.10¾	—
dlvd. W	lb.	.11¼	—
Peru balsam, dms	lb.	1.50	1.75
Petrolatum, amber, dms., c.l., refy.	lb.	.05	.05⅝
t.c.l., dlvd	lb.	.05¾	.07
tanks, refy	lb.	.03¼	.04⅛
cream, dms., c.l., refy.	lb.	.06⅛	.07⅛
t.c.l. dlvd	lb.	.08½	.08¾
tanks, refy	lb.	.04⅜	.05⅜
extra, amber, dms., c.l., refy	lb.	.05¼	.05⅞
t.c.l., dlvd	lb.	.07	.07¼
tanks, refy	lb.	.03½	.04⅜
USP, white, lily, dms., c.l., refy.	lb.	.06⅝	.07¼
t.c.l. dlvd	lb.	.08⅞	.09⅜
tanks, refy	lb.	.05⅞	.06
snow, dms., c.l., refd	lb.	.07¼	.07¾
t.c.l., dlvd	lb.	.09⅜	.09⅞
tanks, refy	lb.	.05⅝	.05⅞
soft, dms., c.l., refy	lb.	.06¾	.07¾
t.c.l., dlvd	lb.	.08½	.08¾
tanks, refy	lb.	.05	.05¾
yellow, soft, dms., c.l., refy.	lb.	.05¼	.05¾
t.c.l. dlvd	lb.	.06⅞	.07⅛
tanks, refy	lb.	.03½	.03⅞
Petroleum lacquer diluent, 150°-240°F., b.r., tanks, West Coast, ex tax, Los Angeles	gal.	.169	.204
East coast, N. J., N. Y	gal.	.16	—
Group 3, benzol-type	gal.	.14125	.14625
toluol-type	gal.	.13125	.13375
Mineral spirits, reg., tanks, California, ex tax, San Francisco	gal.	.164	—
East coast, N. J., N. Y.	gal.	.17	—
Group 3	gal.	.11875	—
tankwagon, Boston	gal.	.19	—
Buffalo	gal.	.195	—
Chicago	gal.	.279	—
Cleveland	gal.	.22	—
Newark	gal.	.18	—
New York	gal.	.18	—
Philadelphia	gal.	.185	—
Pittsburgh	gal.	.18	—
Providence	gal.	.195	—
odorless, tanks, refy., Watson, Cal.	gal.	.245	—
Borger, Tex	gal.	.24	—
Houston, Tex	gal.	.24	—
Wood River, Ill	gal.	.2625	—
dlvd. N. J	gal.	.32	—
dlvd. N. Y	gal.	.33½	—
tankwagon, N. J., dlvd.	gal.	.36	—
N. Y., dlvd	gal.	.37	—
Naphtha, cleaners, tanks, East Coast, N. J., and N. Y.	gal.	.17	—
Group 3	gal.	.12875	—
tankwagon, Newark	gal.	.18	—
New York	gal.	.18	—
Philadelphia	gal.	.185	—
High solvency (see Petroleum solvent, partial aromatic)			
VM&P, 225°-300°F, b.r., tanks, West Coast, Los Angeles	gal.	.169	—
Portland, Ore	gal.	.175	—
San Francisco	gal.	.174	—
Seattle, Wash	gal.	.175	—
East Coast, N. J., N. Y.	gal.	.18	—
Group 3	gal.	.12875	—
tankwagon, Boston	gal.	.205	—
Chicago	gal.	.289	—
Cleveland	gal.	.23	—
Newark	gal.	.195	—
New York	gal.	.195	—
Philadelphia	gal.	.20	—
Pittsburgh	gal.	.19	—
Solvent, partial aromatic, tanks, 205°-282°F, b.r., 41°C., m.a.p., N. Y., N. J	gal.	.245	—
212°-278°F. b.r., 43°C. m.a.p., N. J	gal.	.26	—
212°-284°F. b.r., 19°C. m.a.p., N. J	gal.	.29	—
224°-280°F. b.r., 48°C. m.a.p., Houston	gal.	.215	—
273°-361°F. b.r., 29°C. m.a.p., N. J	gal.	.29	—
282°-325°F. b.r., 41.5°C. m.a.p., Houston	gal.	.25	—
287°-386°F. b.r., 31°C. m.a.p., N. J	gal.	.29	—
310°-344°F. b.r., 13.5°C. m.a.p., Texas City	gal.	.33	—
310°-348°F. b.r., 17°C. m.a.p., N. Y., N. J	gal.	.35	—
320°-360°F. b.r., 16°C. m.a.p., N. Y., N. J	gal.	.33	—
324°-349°F. b.r., 37°C. m.a.p., Houston	gal.	.33	—
341°-390°F. b.r., 35°C. m.a.p., N. J	gal.	.27	—
352°-413°F, b.r., 30°C. m.a.p., Houston	gal.	.33	—
352°-410°F. b.r., 16.5°C. m.a.p., Texas City	gal.	.33	—
358°-401°F. b.r., 25°C. m.a.p., N. Y., N. J	gal.	.39	—
364°-404°F. b.r., 19°C. m.a.p., N. Y., N. J	gal.	.425	—
367°-418°F. b.r., 19.6°C. m.a.p., N. Y., N. J	gal.	.33	—
Rubber, tanks, Cal., ex tax, San Francisco	gal.	.173	—
East Coast, N. J., N. Y.	gal.	.18	—
Group 3	gal.	.12875	—
Stoddard, tanks, East Coast, N. J., N. Y	gal.	.17	—
Group 3	gal.	.12375	—
Pennsylvania, western	gal.	.15	—
Boston	gal.	.19	—
Chicago	gal.	.289	—
Cleveland	gal.	.22	—
Los Angeles, ex tax	gal.	.194	—
Newark	gal.	.18	—
New York	gal.	.18	—
Philadelphia	gal.	.185	—
Pittsburgh	gal.	.18	—
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works	lb.	.16	.18¼
t.c.l., works	lb.	.17	.18½
tanks, works	lb.	.14	.16½
50-55% sulfonic content, non-ret. dms., c.l., works	lb.	.15¼	—
t.c.l., works	lb.	.16½	—
tanks, works	lb.	.12½	—
o-Phenetidine, dms., works	lb.	1.00	—
p-Phenetidine, dms., works	lb.	1.00	—
Phenobarbital, USP, dms., 100-lb. lots	lb.	4.00	—
Phenobarbital-sodium, USP, dms., 100-lb. lots	lb.	4.00	—
Phenol, 90-92% (cresol 8-10%), non-ret. dms., c.l., frt. alld. E. of Rockies	lb.	.15¾	—
t.c.l., same basis	lb.	.16½	—
tanks, same basis	lb.	.14	—
82-84% (cresol 16-18%), non-ret. drums, c.l., same basis	lb.	.15¼	—
t.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13½	—
39° or above, tar distilled, non-ret. dms., c.l., same basis	lb.	.17¼	.17¾
t.c.l., same basis	lb.	.18	.18½
tanks, same basis	lb.	.15½	—
Phenol, USP, syn., dms., c.l., frt. alld.	lb.	.17¾	—
1,000-lb. lots or more, same basis	lb.	.18½	—
less than 1,000-lb. lots, same basis	lb.	.19½	—
tanks, same oasis	lb.	.16	—
Phenolphthalein, USP or yellow, bbls., dms., 2,000-lb. lots	lb.	1.10	—
smaller lots	lb.	1.12	1.17
Phenothiazine NF fib dms. c.l., frt. adjusted	lb.	.39	—
over 2,100 lbs., same basis	lb.	.41	—
less than 2,100 lbs. same basis	lb.	.43	—
Phenyl acetate, dms., 100-lb. lots, works	lb.	.50	—
Salicylate (see Salol)			
Phenylacetaldehyde, soln., 50%, bots	lb.	2.40	2.70
100% bots	lb.	4.00	4.65
Phenylacetamide, 125-lb dms. works	lb	1.10	—
smaller dms., works	lb	1.15	1.10
dl-Phenylalanine, dms. works	lb.	27.00	37.50
1-Phenyl-3-carbethoxy pyrazolone-5, 250-lb. fib. dms., dlvd. E	lb.	3.60	—
smaller dms., dlvd. E	lb.	4.00	—
Phenyldiethanolamine dms., c.l., dlvd. E	lb.	.40½	—
t.c.l., dlvd. E	lb.	.41½	—
tanks, dlvd. E	lb.	.38½	—
m-Phenylenediamine, dms. frt. alld.	lb.	.90	—
o-Phenylenediamine, coml., 100 to 1,000 lbs., fib. dms., works	lb.	1.70	1.80
p-Phenylenediamine, redist., dms., works	lb.	2.00	—
tech., refd., dms., same basis	lb.	1.10	1.35
Phenylethanolamine, dms., c.l., works	lb.	.69½	—
t.c.l. same basis	lb.	.70	—
Phenylethyl acetate, bots	lb.	1.30	—
b-Phenylethylamine, dms., 1,000-lb. lots, works	lb.	1.10	—
smaller lots, works	lb.	1.15	1.40
Phenylethylphenyl acetate, bots	lb.	3.95	4.40
Phenylhydrazine base, CP, bots	lb.	3.00	3.07
Hydrochloride, coml., kgs., works.	lb.	1.75	—
purif., bots., works	lb.	5.17	—
1-Phenyl-3-methyl pyrazolone-5 250-lb. lots, dlvd. E	lb.	1.70	—
smaller lots, dlvd	lb.	2.00	—
o-Phenylphenol, dms., t.c.l., works	lb.	.42	.44
p-Phenylphenol, bgs., c.l., works	lb.	.35	—
t.c.l., works	lb.	.39½	—
Phloroglucinol, coml., fib. dms., works	lb.	6.40	—
C.P., bots., works	lb.	17.75	—
tech., fib dms., works	lb	10.45	—
Phosphate, defluorinated (see under D). Rock, Curacao, Atlantic ports, New Orleans	ton.	43.00	—
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines	long ton.	4.60	—
70-68%, b.p.l., c.l., same basis	long-ton.	5.00	—
72-70%, b.p.l., c.l., same basis	long-ton.	5.65	—
75-74%, b.p.l., c.l., same basis	long-ton.	6.65	—
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 78-76%, b.p.l., c.l., same basis	long-ton.	7.65	—

The above prices are based on fuel oil at $2.20 per bbl. and labor at $1.28. The 3c. labor advance and 9c. fuel oil advance currently absorbed.

Phosphorus, amorph., red, dms., t.l.	lb.	.43	—
smaller lots	lb.	.44	.45
white (yellow), solid, dms., c.l., works, frt. equald	lb.	.20	.20½
t.c.l., works, frt. equald.	lb.	.21	.21½
tanks, works, frt. equald.	lb.	.17	.19
Oxychloride, dms., c.l., works.	lb.	.14	—
t.c.l., dms., works	lb.	.17	—
tanks, works	lb.	.12½	—
Pentasulfide, solid, dms., c.l., works	lb.	.11½	—
t.c.l., works	lb.	.13	.13½
Pentoxide, dms., c.l., works	lb.	.13½	—
t.c.l. works	lb.	.16½	—
Sesquisulfide, tins, cs., works	lb.	.29	—
export, dms	lb.	.31	.36
Trichloride, dms., c.l., works	lb.	.14	—
t.c.l. works	lb.	.17	—
tankcars works	lb.	.12½	—
Phthalic anhydride, ngs, c.l., works, frt. equald	lb.	.20	—
t.c.l. same basis	lb.	.21	—
tanks, same basis	lb.	.19¼	—
Phthalimide, 97%-98%, dms., works, frt alld	lb.	.65	.70
Phthalylsulfacetamide, 1,000-lb. lots or more	lb.	5.00	—

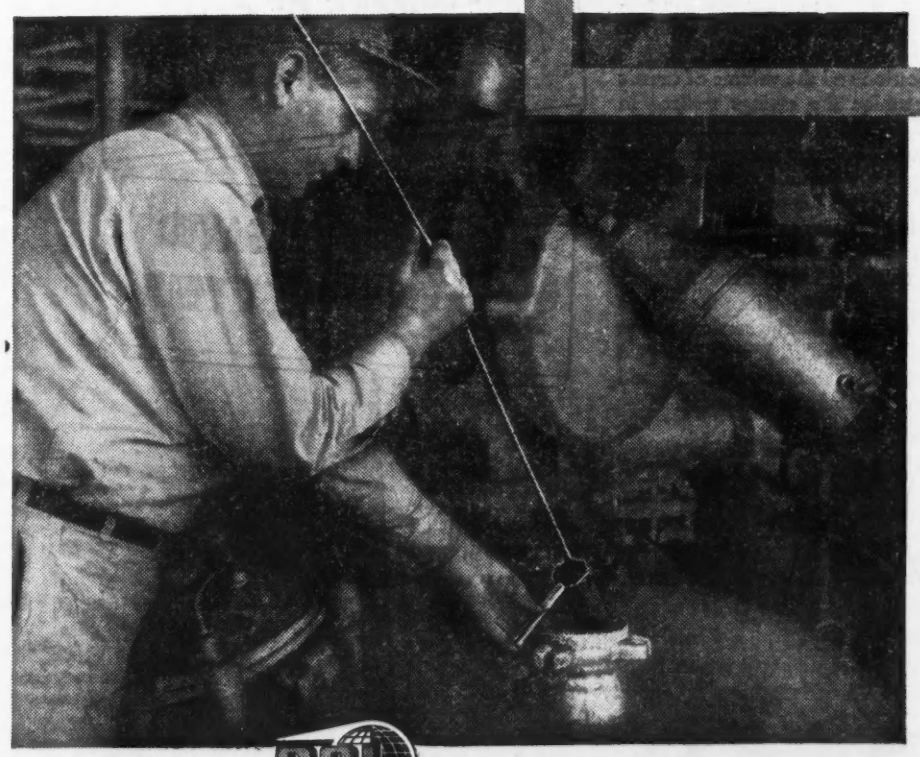
You benefit by the fact that we do our

PENTAERYTHRITOL

testing on a production scale

• As the world's largest manufacturers of surface coating resins, we naturally use a lot of technical grade pentaerythritol—which we make ourselves—in alkyd resin production. Consequently, our pentaerythritol customers benefit by the careful control we exercise in the manufacture of this versatile chemical in order to achieve the uniform hydroxyl value and uniformity of viscosity effects essential to our alkyd cooking.

If you're using technical grade pentaerythritol in synthetic resins, rosin esters, core oils, synthetic waxes, surface-active agents, upgraded drying oils or similar end products, we invite you to investigate us as a source of supply—by getting in touch with our Chemicals Division.



A sample is taken from an alkyd kettle at the Reichhold Chemicals plant in Detroit. Sample will be rushed to production lab for test.

Creative Chemistry . . . Your Partner in Progress

REICHHOLD

Synthetic Resins • Chemical Colors • Industrial Adhesives • Plasticizers
Phenol • Formaldehyde • Glycerine • Phthalic Anhydride • Maleic Anhydride
Sodium Sulfate • Sodium Sulfite • Pentaerythritol • Pentachlorophenol

REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N.Y.

α-Picoline—Pyrogallol

α-Picoline, ret. dms., c.l., works, frt. equald lb. .43 - .43½
l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
β,γ-Picoline, 5°, dms., c.l., works, lb. .32½- —
l.c.l., works lb. .33 - —
γ-Picoline, 98%, dms., c.l., works, lb 2.65 - —
Pilocarpine hydrochloride, USP, bots oz 5.25 - —
Nitrate, USP bots vials oz 4.80 - 4.90
Pimento, Jamaican, bgs lb. .84 - —
Mexican, bgs. lb. .68 - —
Pink root, bls. lb 2.00 - 3.25
d-Piperazine hexahydrate, French Codex, bots kilo 8.00 - 8.50
Piperidine 98% dms. frt. equald lb 2.90 - 3.00
Piperonyl butoxide, dms., dlvd. E. lb 4.50 - 5.05
Cyclonene, dms., dvld E lb 3.70 - 4.25
Pitch, coaltar, 150°-170°F. m.p., tanks, works ton.35.00 - —
Cottonseed, raw, dms., works lb. .02¼- .03
Linseed dms lb. .06 Nom.
Marine, dms. lb. .04¼ .05
Petroleum (see Asphalt, petroleum).
Soybean dms. works lb .05 Nom
Tall, dms., works lb .03¾ 04⅛
Plaster of Paris (see Gypsum).
Platinum metal, works oz.76.00 -79.00
Pleurisy root, bls m .45 .50
Podophyllum resin, NF, dms lb.11.95 - —
Poke root, bls lb .19 - .22
Polymyxin, bulk, bots., dms., 50 billion units or more, 1,000,000 units. .52 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000 lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
Poppy seed, Argentine, bgs lb. .22 - —
Dutch, bgs. lb. .26½- —
Iranian, bgs. lb. .16 - .17
Polish, bgs. lb. .25½- —
Turkish, bgs. lb. .22 - —
Potash, caustic, reg., flake, 88-92%, dms., c.l., works 100 lbs. 9.15 - —
l.c.l., works 100 lbs 10.20 - —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs 5.05 - —
tanks, same basis 100 lbs 3.70 - —
solid, 88-92%, dms., c.l., works 100 lbs 8.70 - —
l.c.l., works 100 lbs 9.75 - —
Potassium acetate, NF, dms lb. .31 - .36
Bicarbonate, USP gran. dms lb .22 - —
powd. dms lb .24 - —
Bichromate, bgs., c.l., works lb. .15 - —
l.c.l., works lb. .15½- —
Potassium bichromate in dms ¾c higher.
Bitartrate, NF, dom., gran or powd., bbls., 5,000 lbs 1 shpt lb. .36½- —
dms., c.l. lb. .36 - —
smaller lots lb. .37 - .40
imp., kgs lb. .27¾- .28
Bromate, dms., 1,000 lbs. or more, lb .47 - —
25-200-lb. lots lb. .57 - .62
Potassium bromide, USP, gran., bbls., kgs. lb. .35 - .36
Carbonate, N.F., gram., bbls., dms, lb. .20 - —
powd., bbls., dms lb. .21 - .22
tech., calcined, bbls., c.l., works, 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs.10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs 8.65 - —
Chlorate, cryst., dms., c.l., works lb. .10¼ - —
l.c.l., works lb. .11½- .12
powd., dms., c.l., works lb. .10¾ - —
l.c.l., works lb. .12 - .12½
export, dms., New York lb. .12¾ - .13½
NF, gran., 25-lb. metal dms lb. .35 - —
Chloride, USP, cryst., dms lb. .21 - .23
gran. dms lb .15 - .17
powd. dms lb .24 - .26
Chromate, tech., bgs lb. .50 - .50½
Citrate, USP gran., dms lb. .41 - —
powd., dms lb. .40½- .41½
Cyanide, dms., 20,000-lb. lots or more, works lb. .45 - —
2,000-19,999-lb lots lb. .455 - —
smaller lots, works lb. .465 - —
Dichromate (see Potassium bichromate).
Ferricyanide, drums, ton lots lb. .50 - —
Ferrocyanide, bgs., ton lots lb. .22½- —
smaller lots lb. .23 - —
Fluorborate, fib, dms., c.l., works lb. .30 - —
l.c.l., works lb. .31 - —
Fluoride, dms., works lb. .37 - .38
Gluconate dms lb. .75 - .79
Glycerophosphate, 75% solution, cbys lb 2.15 - 2.25
Guaiacolsulfonate, NF, dms lb. 2.10 - 2.30
Potassium hydroxide, tech. (see Potash caustic), USP, pellets 100-lb. dms. 1 to 100-dm. lots lb. .28½- .33
Hypophosphite, NF, fib, dms., ton lots or less lb. 1.00 - 1.03
Iodide, dms. lb. 2.15 - 2.20
Manure salt 22% K_2O, bulk, mines unit-ton. .21 - —
screened dms lb. .25 - —
Muriate, dom., 50-60% K_2O, bulk, Carlsbad, N. M. unit-ton. .39 - .39½
50-51% K_2O paper bgs. carlsbad, N. M ton.25.70 - —
Nitrate, cryst., bbls., 10,000-ton lots 100 lbs.14.40 - —
smaller lots 100 lbs.14.65 -14.90
gran., bbls., 20-ton lots.100 lbs. 9.75 - —
smaller lots 100 lbs.11.10 -11.50
powd., bbls., 20-ton lots.100 lbs.10.75 - —
smaller lots 100 lbs.12.00 -12.50
USP, gran., dms. lb. .18 - —
Potassium nitrate in bags 55c. per 100 lbs. less in kegs, $1 more.
Oxalate, neutral, tech., fine gran., bbls., dms lb. .30 - .32
Pentaborate, gran., bgs., c.l., works ton.189.00 - —
dms., ton lots, ex whse ton.293.50 - —
smaller lots, ex whse ton.29000 - —
Powdered Potassium pentaborate $10.25 per ton higher.
Perchlorate, dms., c.l., works lb. .15 - —
l.c.l., works lb. .16½- —
Permanganate, tech., dms., works, lb. .22½- .23½
USP dms works lb. .24⅝ .30¼
Persulfate, dms., 5-ton lots, works, lb. .18 - —
1-ton lots, works lb. .20 - —
Phosphate, tetrabasic, bbls., works, lb. .16½- .18½
Prussiate red, (see Potassium Ferricyanide)
yellow (see Potassium Ferrocyanide)
Silicate, glass, bgs., c.l., works 100 lbs.17.00 -17.30
c.l. 100 lbs 17.80 —
Silicate, soln., clarif., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
l.c.l., 5 dms., or more, works 100 lbs. 6.55 - 6.95
tanks, works 100 lbs 5.45 -
electrical grade, 29° Be, 1:2.0 dms., c.l., works 100 lbs. 6.50 - —
l.c.l., 5 dms or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
l.c.l., 5 dms or more, works 100 lbs. 7.20 - 7.60
tanks, works 100 lbs 6.10 - —
Silicofluoride, bbls., works lb. .09 - .10
Stannate, dms., frt. alld. E lb. .674 - .740
Sulfate, agricultural, 49-51% K_2O, bulk, works unit-ton. .74½- —
NF VII cryst. dms lb. .31 .33
gran dms. lb. .18½- —
powder dms lb. .16½- .17
Sulfocyanide, NF, cryst. (see Potassium thiocyanate).
Thiocyanate, NF, cryst., dms lb. .84 - .94
tech., works lb. .77 - .79
Titanate, ctrs., c.l., works lb. .14 - —
5-ton lots, works lb. .14½- —
1-ton lot or less, works lb. .14¾- —
Toluene sulfonate, dms., c.l. or tl. works lb. .42 - —
l.c.l., works lb. .46 - —
Potassium-magnesium sulfate, bulk, works basis 40% K_2SO_4, 18% MgO ton.16.00 - —
Potassium-sodium tartrate, NF gran., powd., dms., c.l. lb. .36½- —
5,000-lb. lots lb. .37 - —
smaller lots lb. .37½- .42½
Potassium-titanium fluoride, fib, dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib, dms., c.l., works lb. .50 - —
l.c.l., works lb. .52½- .55
Pregnenolone, bots gram. .45 - —
Acetate, bots gram. .40 - —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld lb. 2.90 - —
100-lb lots lb. 3.00 - 3.60
Progesterone, USP, bots., 100 gram lots gram. .50 - —
Acetate, bots gram. .70 - —
Propane, indust., tanks, group 3, gal. .02½- —
N. Y Harbor gal. .07¼- —
n-Propyl acetate, dms., c.l., dlvd lb. .12¾- —
l.c.l., dlvd lb. .13¾- —
tanks, dlvd lb. .1075- —
Gallate, dms., 100 to 2,000-lb. lots, works lb 3.90 - 4.40
n-Propyl p-hydroxybenzoate, USP, dms lb. 2.30 - 2.40
Thiouracil, bots., 50-kilo lots or more kilo.55.00 - —
smaller lots kilo.55.10 -55.30
Propylene dichloride, dms., c.l., dlvd. E lb. .0825- —
l.c.l., same basis lb. .095 - —
tanks, same basis lb .07 - —
Prices in West 1c. higher dlvd., on same basis.
Glycol, indust., dms., c.l., dlvd. E lb. .14¾- —
l.c.l., same basis lb. .15¾- —
tanks, same basis lb. .13 - —
USP, dms., c.l., dlvd. E lb. .16¾- —
l.c.l., same basis lb. .17¾- —
tanks, same basis lb. .15 - —
methyl ether, dms., c.l., dlvd lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Oxide, dms., c.l., dlvd. E lb .17 - —
l.c.l. dlvd. E lb. .18 - —
tanks, dlvd. E lb. .15 - —
Psyllium seed, black, bgs. lb. .55 - —
blonde, bgs. lb. .18 - —
husks, bgs. lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅝- .04¼
smaller lots lb. .03⅞- .04⅛
imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs. ton lots lb. .04 - —
sun dried, coarse, bgs ton. lots lb. .02½- .04
fine bgs., ton lots lb. .02½- .04
Pumpkin seed, bgs lb. .25 - .26
Pyrethrin, syn., (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works lb. .45 - —
powd., 1.3% pyrethrins, bbls., works lb. .65 - —
liq. 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.35 - 8.55
100/1 basis (10 grams pyrethrins per 100cc odorless base), dms., works gal.41.75 -42.75
oleoresin, dewaxed, 20%, dms., works lb. 9.80 - 9.90
purif., 20% dms., works lb.10.00 -10.10
Pyridine, denaturing, dms., c.l., works and frt. equald gal. 2.77 - —
l.c.l., same basis gal. 3.60 - —
refd., 2°, non-ret. dms., l.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram. .46 - —
Pyrites, Canadian, works long-ton. 3.00 - 3.60
Pyrocatechol (see Catechol).
Pyrogallol, NF, dms. lb. 3.27 - 3.30

CUSTOMER "A" SAVED $2,850 THE FIRST YEAR

CUSTOMER "B" SAVED $2,650 THE FIRST YEAR

CUSTOMER "C" SAVED $3,500 THE FIRST YEAR

CUSTOMER "D" SAVED $2,055 THE FIRST YEAR

73% CAUSTIC SODA may be a sign of savings for you!

More and more users, who have been buying 50% caustic soda, are following the trend to 73% concentration. This practice is being advanced and advocated by Columbia-Southern because of the possible savings in delivered cost by converting to the higher concentration.

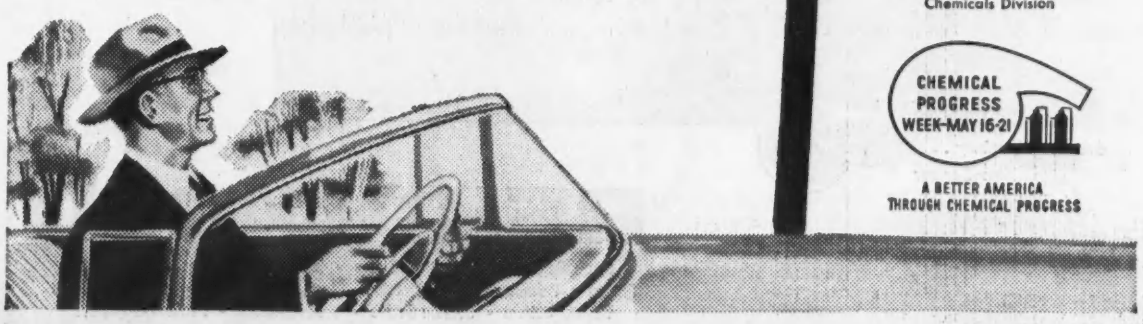
Naturally, your location and the volume of caustic soda consumed determine the savings realized in switching from 50% to 73% concentration. But, regardless of the amount of caustic soda you use, we suggest you investigate the possible savings in your operation.

The examples of annual savings shown on the sign post are taken from customers' records, selected at random, who converted to 73% caustic soda.

We believe it will pay you to look into the savings of buying 73% rather than 50%. The services of our technical staff are at your disposal. We shall be glad to confer with you, make recommendations, and supply data. Write our Pittsburgh office today.

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

DISTRICT OFFICES: Cincinnati, Charlotte • Chicago • Cleveland Boston • New York • St. Louis Minneapolis • New Orleans Dallas • Houston • Pittsburgh Philadelphia • San Francisco
IN CANADA: Standard Chemical Limited and its Commercial Chemicals Division



CHEMICAL PROGRESS WEEK-MAY 16-21
A BETTER AMERICA THROUGH CHEMICAL PROGRESS

Pyroxylin, scrap, ungrd., amber, dms., works lb. .20 - —
black, dms., works lb. .12 - —
mixed, mottled, dms. works lb. .13 —
shavings, amber, cs., works lb. No stocks.
mixed colors, dms., works lb. .11 - —
white, china, ivory, dms., works lb. .16 - —
dense, opaque, dms., works. lb. .12 - .15
translucent pastels, cs., works. lb. .14 - —
transparent colorless, dms., works lb. .25 - —
colors, dms., works lb. .15 - —
USP, bots lb. 9.50 - —

Q

Quassia chips lb. .17 - —
Quebracho extract, clarif., grd., 70% tannin bgs. c.l., lb. .16½- .16¾
liq., 35% tannin bbls., works. lb. .08¼- —
solid., clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. 12 23-64 —
ord. 63% tannin, bgs., c.l., same basis lb. 11 21-32 —
Quercitron extract, cryst., No. 1, bbls., t.c.l. lb. .40 - —
liq., No. 1, bbls., t.c.l lb. .19 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 2.00 Nom.
Quinidine, NF, V cryst., cns., 100-oz. lots oz. 1.15 - —
powd. precip. cns., 100-oz. lots. oz. 1.17 - —
Sulfate, USP, cns., 100-oz. lots. oz. .87 - —
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Bisulfate, USP, cns., 100-oz. lots oz. .37½- —
Dihydrochloride, USP, cns., 100-oz. lots oz. .54 - —
Ethylcarbonate, NF, cns., 100-oz. lots oz. .63½- —
Hydrobromide NF cns. 50-oz cns. oz. .47½- —
Hydrochloride, USP, cns., 100-oz. lots oz. .47½- —
Phosphate NF cns. 100-oz. lots.oz. .61 - —
Salicylate NF cns., 100-oz. lots.oz. .55 - —
Sulfate, USP, cns., 100-oz. lots.oz. .42 - —
Quinine and Urea hydrochloride NF, cns oz. .56 - —
Quinoline, dms., c.l., frt. equald lb. .56¾- —
t.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt, paste, dms., frt. alld., 100% basis lb. .88 - —
powd., frt. alld., 100% basis lb. .98 - —
Rauwolfia serpentina root, pwd., bbls, dms lb. 2.00 - 3.00
Red, BON acid maroons, pure, bbls lb. 1.75 - —
resinated, bbls lb. 1.50 - —
arylid, deep shades, bbls lb. 3.60 - —
light shades, bbls lb. 2.75 - —
maroon, bbls lb. 3.60 5.90
Cadmium, CP, dark shade, bbls., frt. alld, E. of Rockies lb. 4.30 - —
light shade same basis lb. 4.00 - —
medium shade bbls. same basis lb. 4.25 - —
lithopone, medium-light shade, bbls., same basis lb. 4.05 - —
orange shade, bbls., same basis lb. 3.95 - —
deep shade, bbls., same basis lb. 1.93 - —
light shade, bbls., same basis lb. 1.70 - —
maroon shade, bbls. same basis lb. 2.05 - —
medium shade, bbls. same basis lb. 1.85 - —
medium-light shade, bbls., same basis lb. 1.77 - —
orange-red shade, bbls. same basis lb. 1.64 - —

Red cadmium lithopone all shades, in smaller pkgs., 5c. per lb higher; all prices are 1c per lb higher ex whse Los Angeles and San Francisco

Carmine No. 40 (see Carmine).
Dyes (see Dyes, coaltar)
Eosin toner, bbls, works lb. 1.60 - —
Indian, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y. lb. .12¾- —
Iron oxide, nat., 75%-85% ferric oxide, bgs., t.c.l., Bethlehem, Pa., Copley O., Easton, Pa., East St. Louis lb. .04 - .07½
syn. 98% ferric oxide, bgs., c.l., works lb. .12¾- —
t.c.l., works lb. .13 - —
Lake C toner, alizarin, bbls., works lb. 1.10 - 1.20
Lithol toner, bbls., works lb. .85 - —
rubine toner, pure, bbls., works. lb. 1.50 - —
resinated, bbls., works lb. 1.40 - —
Virginia type, bbls., works lb. 1.40 - —
Maroon toner, MNPT, kgs., works. lb. 3.50 - —
10,000-lb lots, works lb. 4.22 - —
smaller lots, works lb. 4.24 - —
Metallic, bbls., c.l., works lb. 02½- —
t.c.l., works lb. 02¾- —
Naphthol ITR, bbls., works lb. 5.25 - —
Oxide (see Red iron oxide).
Persian Gulf, bgs., c.l., works lb. .06¾- —
t.c.l works .07 - —
Para, toner, bbls. lb. 1.05 - —
chlorinated, kgs lb. 1.10 - 1.15
Phloxin toner (see Red eosin toner).
Rhodamine, molybdated, PMA, kegs lb 5.35 - —
tungstated, PTMA, works, kegs. lb. 6.15 - —
Spanish oxide, bbls., c.l., ex dock lb. .05¾- —
t.c.l., ex dock lb. .06 - —
ex whse., New York lb. .06½- —
Toluidine toner, deep shades, kgs., works lb. 1.60 - —
light shades, kgs., works lb. 1.60 - —
Turkey, bbls., works lb. .62 - —
Tuscan, bbls., frt. equald lb. 24½- 25
Venetian, 15%, bgs., works lb. .0350- .037
20%, bgs., works lb. .0475- —
25%, bgs., works lb. .0525- —
30%, bgs., works lb. .0550- —
35%, bgs., works lb. .0575- —
40%, bgs., works lb. .0625- —
Watchung-type, bbls lb. 1.95 - —
Red KB base (see 4-Chloro-2-aminotoluene).
Red, precipitate (see Mercuric oxide red).
Red saunders, NF, powd., bbls lb. .35 - .40
Reserpine, cryst., bots gram. 12.00 - —
Resorcinol, tech. grade, dms., c.l., works lb. 77½- —
t.c.l., works lb. .78½- —
Resorcinol, USP, cryst., dms., works lb. 2.75 - —
powd., dms., works lb 2.95 - —
Monoacetate, NF, dms lb 3.00 - 3.25
Rhatany root, bgs lb. 15 - 18
Rhodinol 5-lb. cans lb. 25.50 - 34.00
Rhubarb root, India, whole, bgs lb. 1.75 Nom.
powd., bbls lb. 2.50 Nom.
Riboflavin, USP, bots., dlvd kilo. 100.00 - —
readily soluble, bots, dlvd kilo. 130.00 —
5'-phosphate-sodium, 100-kilo lots or more kilo. 140.00 —
Rochelle salt (see Potassium-sodium tartrate).
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works, 100% basis lb. 10.00 - —
resin, 25-45%, fib, dms., works, 30% basis lb 3.00 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb .03 - —
ton lots, same basis lb .04 - —
Rutin, NF, fib, dms, 25-kilo lots. kilo. 17.50 - 18.50
10 to 25-kilo lots kilo 17.50 - 20.00
1 to 10-kilo lots kilo 18.90 - 20.00
Ryania, 100% powd., bgs., c.l., works lb. .22 - —
t.c.l., same basis lb. .24 - —

S

Sabadilla seed, powd., bbls lb. .49 - 45¼
activated, ground with lime, bbls lb. .30 - .32
Saccharin, USP, cryst., soluble, dms., 1000-lb lots lb 1.60 —
smaller lots lb 1.70 1.80
powd., soluble insoluble, dms. 1000-lb lots lb 1.65 —
smaller lots lb 1.75 1.95
Saffron, Spanish, USP, tins lb. 35.00 - 40.00
Safrol, dms lb. 1.60 —
Sage, Cretan, bgs lb. .11 - —
Dalmatian, bgs. lb. .40 - —
Italian, bgs. lb. .13 - —
Sago flour, raw, bgs lb. .06½- .06¾
refd., bgs lb. .08¼- .08¾
Sal soda (see Soda sal).
Salol, NF, gran., bbls., kgs lb. 1.10 - —
Powdered salol, 25c higher
Salt, rock, paper bgs., c.l. 100 lbs. .93 - —
table, vacuum, common, fine, paper bgs., c.l 100 lbs. 1.12 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indies, chips bgs. .65 - .66
powd., fib dms lb. .75 - .76
Sanguinarine nitrate, bots oz. 4.75 - 5.50
Sarsaparilla root, imp., Honduras, bls lb. .63 Nom.
Mexican, bls lb. .65 Nom.
Sassafras root bark, ord., bls lb. .45 - —
select, bbls. lb. .63 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .95 - —
powd., bgs., frt. alld lb. .93 - —
Scopolamine hydrobromide, USP, bots oz. 10.25 - 11.50
Seidlitz mixture, bbls., 5,000-lb. lots lb. .30½- —
smaller lots lb. .31 .32
Selenium, powd., dms., dlvd lb. 6.00 - 7.25
Senega root, bls lb. 3.50 - 3.60
Senna leaves, Alex., whole and half, bls lb. .19 - —
siftings lb. .17 - —
Tinnevelly, No. 1, bls lb. .16 - .18
No. 2, bls. lb. .13 - .15
No. 3, bls. lb. .11 - .13
powdered, bbls., bxs lb. .18 - —
pods, bls. lb. .14 - —
Serpentaria root, bls lb. 4.95 - —
Sesame seed, Nicaragua, hulled, shipt., bgs lb. .24 - —
nat., bgs lb. .17 - —
Salvadorian, natural lb. .16½- —
Shellac, bleached, bonedry, bgs., 1,500-lb lots lb. 60 - —
bbls., 1,500-lb lots lb. 62 - —
kgs., 1,500-lb lots lb. 63 - —
refd., bgs., 1,500-lb. lots lb. 68 - —
bbls, 1,500-lb lots lb. 70 - —
kgs 1,500-lb lots lb. 71 - —

Bonedry shellac prices for less than 1,500 lb lots 1c. per lb higher for all packages.

Lemon, No. 1, bgs., 10-bg. lots lb. .58 - .60
No. 2, bgs., 10-bag lots lb. .57 - .59
Superfine, bgs., 10-bag lots lb. .56 - .57
TN, bgs., 10-bag lots lb. .55 - —

Shellac in 1 to 10 bg. lots 1c. per lb. more.

Shingle stain oil (see Oil shingle stain)
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton. 25.00 —
t.c.l., works, exwhse ton. 45.00 - 55.00
hard-quartz, 99½, 325 mesh, bgs. c.l., works ton. 20.00 —
t.c.l., works ton. 25.00 - 30.00
140 mesh, bgs., c.l., works ton. 15.00 —
t.c.l., works ton. 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .16 - —
t.c.l., works lb. .20 .28½
Silver bullion, ingots, cs Troy oz. .88½- —
Cyanide, fib dms., 2,500-oz. lots. oz. .79¾- —
1,000-oz. lots oz. .79¼- —
500-oz. lots oz. .80¼- —
100-oz. lots oz. .80½- —

Plan NOW to ANSWER THIS SUMMER'S ODOR COMPLAINTS WITH

ORTHOSOLV

The Chlorobenzene that MIXES WITH WATER

For Low-Cost, Easy Use!

Typical Applications of ORTHOSOLV

- Incinerator smoke
- Sewage plants
- New excess-capacity sewers
- Drainage ditches
- Storm sewers
- Sewer breaks
- De-watering of sludge
- Fish market areas
- Land fill refuse disposal
- Refuse cans and trucks
- Dog kennels
- Rendering plants

NOTE: ORTHOSOLV can be safely recommended to private individuals or business concerns for the elimination of odor-causing conditions.

ORTHOSOLV is a concentrated, 100% active material which affords effective odor control even when diluted with as much as *1 part to 100 parts of water!*

It has been used and proven effective in controlling odors from a wide variety of sources in municipalities all over the country.

ORTHOSOLV solutions are *low in cost* and easy to use with street flushers, pressure pumps and hand sprayers.

If you have a particular odor problem, write us giving details and we will be glad to send you our recommendations for controlling it. For FREE LITERATURE and TEST SAMPLES** use coupon below.

Other Applications of ORTHOSOLV

Orthosolv is also a highly efficient water dispersible solvent-cleaner for the removal of:

1. Grease and tar from trucks and equipment
2. Oils and greases from concrete floors

Orthosolv can be removed with a water flush or a steam jenny. Orthosolv is safe. It has a high flash point and is not a fire hazard.

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*Trade Mark
**In Western Hemisphere Countries only

Mail Coupon Today for Free Literature and Test Samples!

Allied Chemical

SOLVAY PROCESS DIVISION
ALLIED CHEMICAL & DYE CORPORATION
61 Broadway, New York 6, N. Y.

Gentlemen: Please send me WITHOUT COST OR OBLIGATION:**

☐ TEST SAMPLES

FREE LITERATURE:
☐ Orthosolv for Controlling Objectionable Odors
☐ Orthosolv for Use as a Solvent-Cleaner

Name _____
Title _____ Affiliation _____
Address _____
City _____ Zone _____ State _____ DU-5

Silver Nitrate—Sodium Salicylate

Silver nitrate, CP, cryst., fib., dms.,
bots., 20,000-oz. lots ..... oz. .56½- —
bots., 2,500-oz. lots ..... oz. .56¾- —
bots., 1,000-oz. lots ..... oz. .58¾- —
bots., 500-oz. lots ..... oz. .59¼- —
bots., 250-oz. lots ..... oz. .59⅝- —

USP granular silver nitrate 4c. per oz. higher.

Proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.05 • —
strong, NF, bots., dms., 1,000-oz. lots oz. 1.00 • —

Soapbark, whole, bls ..... lb. .45 • —
crushed, bls., bbls ..... lb. .55 • —
powd., bbls ..... lb. .55 • —

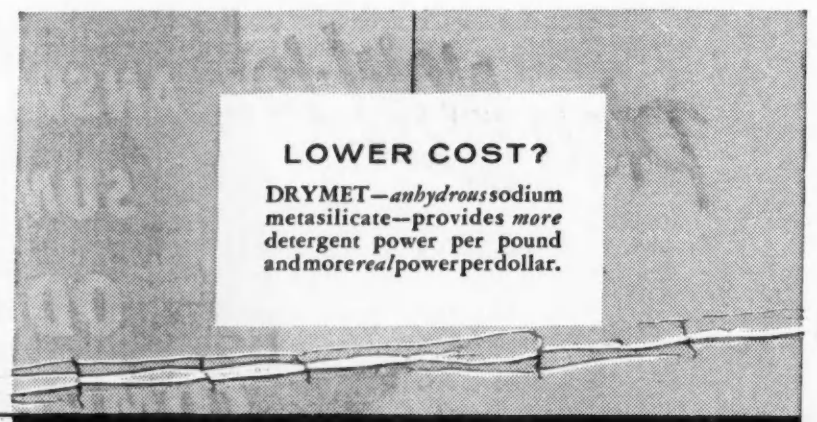
Soda ash, dense, 58% paper bgs., c.l., works 100 lbs. 1.70 • —
l.c.l., stock points 100 lbs. 2.80 • 4.57
bbls., c.l., works 100 lbs. 2.30 • —
l.c.l., stock points 100 lbs. 3.35 • 4.12
bulk, c.l., works 100 lbs. 1.40 • —
light, 58%, paper bgs., c.l., works 100 lbs. 1.65 • —
l.c.l., stock points 100 lbs. 3.75 • 4.52
bbls., c.l., works 100 lbs. 2.20 • —
l.c.l., stock points 100 lbs. 3.25 • 5.52
bulk c.l. works 100 lbs 1.35 • —

Caustic, flake, powd., 76% dms., c.l., works, frt. equald 100 lbs. 4.25 • —
l.c.l. stock points 100 lbs 5.45 • —
liq., 50%, sellers, tanks, works, dry basis 100 lbs. 2.70 • —
rayon-type, sellers' tanks, works, dry basis 100 lbs. 2.70 • —
70%, sellers' tanks, works, dry basis 100 lbs. 2.80 • —
rayon-type, sellers' tanks, works, dry basis 100 lbs. 2.80 • —

Soda, caustic, solid, 76%, dms., c.l., works 100 lbs. 3.85 • —
l.c.l., stock points 100 lbs. 5.05 • —
Sal., bgs., c.l., works 100 lbs. 1.40 • —
l.c.l., works 100 lbs. 1.70 • —
Sodium acetate, anhyd., bgs., c.l., works lb. .12 • —
dms., c.l., works lb. .12¾- —
NF, 60%, gran., dms., c.l., works lb. .12½- —
l.c.l., works lb. .14 • —
Alginate, NF, white powd., dms., ton lots, works lb. .87 • 1.30
refd., bbls., works lb. .83 • —
p-Aminobenzoate, dms., 1,000-lb. lots or more lb. 2.40 • —
smaller lots lb. 2.45 • 2.50
p-Aminosalicylate, dms., 1,000-lb. lots or more, frt. adjusted lb. 3.75 • —
smaller lots, same basis lb. 3.80 • 4.25
Antimoniate, bbls., c.l., dlvd. E lb. .29 • —
l.c.l., dlvd E lb. .30½- —
Arsenate, dms., c.l., works lb. .12½- —
l.c.l., works lb. .13¾- .14¾
Arsenite, dms., c.l., works lb. .13½- —
l.c.l., works lb. .14¼- .15⅛
soln., dms., works gal. .70 • 1.10
Ascorbate, dms., 25-50 kilo lots kilo.16.00 • —
10-kilo lots kilo.16.35 • —
5-kilo lots kilo.16.75 • —
1-kilo lots kilo.17.00 • —
bots., 500-gram lots kilo.17.50 • —
Benzoate, tech., bbls., dms., 100-lb lots or more lb. .39 • —
USP, bbls., dms., 100-lb. lots, or more lb. .46 • —

Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.70 • —
l.c.l., works 100 lbs 3.70 • —
powd., bgs., c.l., works 100 lbs 2.30 • —
l.c.l., works 100 lbs 3.30 • —
Bichromate, bgs., c.l., works lb. .11½- —
l.c.l., works lb. .12 • .13¼
Bifluoride, bbls., c.l., works, frt. equaled lb. .17½- —
l.c.l., same basis lb. .1790- —
Bisulfate, bulk., c.l., works 100 lbs. 2.00 • —
dms., c.l., frt. equald 100 lbs. 3.00 • 3.60
l.c.l., frt. equald 100 lbs. 3.50 • 4.10
Bisulfite, anhyd., bgs., c.l., works, 100 lbs. 4.50 • —
l.c.l., works 100 lbs. 4.90 • —
soln., 35°, bbls., c.l., works, 100 lbs. 1.55 • —
l.c.l., works 100 lbs. 2.05 • —
Borate (see Borax).
Bromide, USP, bbls., works lb. .35 • —
Carbonate, anhyd. (see Soda ash), cryst., monohydrated (see Soda, sal), monohydrated bgs., c.l., works, 100 lbs. 2.90 • —
l.c.l., works 100lbs. 3.30 • —
Carboxymethyl cellulose (see CMC).
Chlorate, cryst., dms., c.l., works lb. .08¾- —
l.c.l., works lb. .10¼- .11
Chloride, tech. (see Salt).
USP, bgs. lb. .05 • .12
Chlorite, tech., dms., c.l., works, lb. .58 • —
20-ton lots or more, works, lb. .66 • —
smaller lots, works lb. .70 • .73
Chloroacetate, tech., dms., c.l., works lb. .27 • —
l.c.l., works lb. .28 • —

Sodium Chromate, dms., c.l., works lb. .13¼- —
l.c.l., same basis lb. .13¾- .15
Citrate, anhyd., dms. lb. .60 • .65
NF VIII, gran., dms lb. .26 • .30½
USP, XVI gran., dms lb. .29¼- .34
Sodium citrate, USP, powd. prices ½c. higher.
Cyanate, dms., 1,000-lb. lots, works lb. .85 • 1.10
smaller lots works lb. 1.00 1.25
Cyanide flake, 96-98%, dms., c.l., or 20,000-lb. lots lb. .173 • —
over 1,000-lb lots lb. .183 • —
100-lb. to 1,000-lb. lots lb. .198 • —
Granular sodium cyanide 1c higher.
Diacetate, 33-35% acidity, 250-lb. dms., works lb. .14 • —
l.c.l., works lb. .14¾- —
anhyd., dms., c.l., works lb. .17 • —
l.c.l., works lb. .17¾- —
Dichromate (see Sodium bichromate).
Ferrocyanide, bgs., 10-ton lots lb. .13½- —
smaller lots lb. .14 • —
Fluoride white, 97%, fib. dms., c.l., works, frt. equald lb. .1250- —
l.c.l., works lb. .1290- —
Formate, bgs., c.l., dlvd. E 100 lbs. 7.60 • —
l.c.l., works 100 lbs. 8.65 • —
Genticate, 100-lb. fib. dms. lb. 8.50 • —
Gluconate, refd., dms. lb. .80 • .83
tech., dms lb. .35 • —
Glutamate, mono-, dms., c.l lb. 1.55 • —
Glycerophosphate, NF, cryst., bbls. lb. 2.10 • 2.25
powd., bbls lb. 2.15 • 2.30
soln., 75%, cbys. lb. 1.45 • 1.60
Hydride, dms., works lb. 1.80 • 3.00
Hydrosulfide (see Sodium sulfhydrate).
Hydrosulfite, dms., c.l., frt. alld. lb. .20 • —
l.c.l., frt. alld lb. .20½- —
Hydroxide, tech. (see soda caustic).
NF, pellets, 100-lb dms., 1 to 100-dm. lots lb. .18½- .23
Hypophosphite, NF, dms., ton-lots or less lb. .95 • .98
Hyposulfite, USP (see Sodium thiosulfate).
pea crystals, bgs. 100 lbs. 4.50 • —
gran., bgs., c.l., works 100 lbs. 4.75 • 5.00
photo grade, bgs., c.l., works, 100 lbs. 4.50 • 4.75
l.c.l., works 100 lbs. 5.00 • 5.05
tech., bgs., works lb. 4.50 • —
l.c.l., works 100 lbs. 4.90 • 6.90
Sodium hyposulfite crystals in bbls., 50c. higher.
Iodide, USP, bots., dms lb. 2.80 • 2.92
Lactate, edible, 50%, cbys., dms., works lb. .21½- —
60% cbys., dms., works lb. .26½- —
tech., 50%, cbys., dms., works, lb. 16¼- —
Lauryl sulfate, dms., c.l., dlvd lb. .22 • —
l.c.l., dvld lb. .23 • —
tanks, dlvd lb. .20 • —
Metabisulfite (see Sodium bisulfite).
Metaborate, octahydrate, gran bgs., c.l., works ton.78.50 • —
l.c.l. ex whse ton.124.50 • 129.50
Sodium metaborate, octahydrate in bbls. $24.50 per ton higher.
Tetrahydrate, bbls., c.l., works, ton.199.50 • —
Metallic, bricks, 14,000-lb. lots or more, works lb. .17 • .19
less than 14,000-lb. lots, works, lb. .173 • .195
tanks, works lb. .16 • —
Metanilate, bbls., frt. alld lb. .62 • —
Metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.10 • —
l.c.l., works 100 lbs. 5.45 • 7.35
dms., c.l. 100 lbs. 5.50 • —
l.c.l. 100 lbs. 5.85 • 7.75
Pentahydrate, bgs., c.l., works, 100 lbs. 4.10 • —
l.c.l., works 100 lbs. 4.45 • 6.35
dms., c.l., works 100 lbs. 4.50 • —
l.c.l., works 100 lbs. 5.10 • 5.85
Molybdate, bbls., cbys., works lb. .85 • .95
anhyd., powd., dms., works lb. .85 • .92
cryst., dms., works lb. .70 • —
Monohydrate (see Sodium carbonate, monohydrated).
Naphthionate, bbls lb. .70 • —
Nitrate, crude, dom., bgs., c.l., works ton.47.00 • —
bulk, c.l., works ton.43.50 • —
imp., 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton.51.25 • —
bulk, c.l., same basis ton.47.75 • —
Nitrite, USP, bbls., c.l., works, frt. equaled lb. .08 • —
l.c.l., same basis lb. .09½- —
Orthosilicate, conc., dms., c.l., works 100 lbs. 6.00 • —
l.c.l., works 100 lbs. 6.35 • 6.75
hydrated, flake, bbls., c.l., works, 100 lbs. 5.25 • —
l.c.l., dlvd 160 lbs. 7.00 • —
Oxalate, 88%, bgs., works 100 lbs. 10.85 • —
Para-aminobenzoate (see sodium p-Aminobenzoate).
Para-aminosalicylate (see Sodium p-Aminosalicylate).
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald lb. .25½- —
l.c.l., same basis lb. .26½ .28¼
pellets, bgs., c.l., same basis lb. .25 • —
l.c.l., same basis lb. .26 • .28
powd., bgs., dms., c.l., same basis lb. .24 • —
l.c.l., same basis lb. .25½- .32
Pentachlorophenate, 20,000 lbs. min. truckloads, ¼c. per lb. over carlot prices.
Perborate, NF, tech., bgs., c.l., works lb. .173 • —
l.c.l., works lb. .178 • —
Peroxide, dms., c.l., dlvd. E. of Miss lb. .1860- —
l.c.l., same basis lb. .1910- .1960
Phenolsulfonate, USP IX, gran., dms. lb. .44 • .45
powd., dms lb. .47 • .48
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.45 • —
l.c.l., works 100 lbs. 7.85 • —
USP, dried powd., bgs., dms., works lb. .19 • .20½
monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.45 • —
l.c.l., frt. equald 100 lbs. 8.90 • —
duohydrate, bgs., c.l., frt. equald 100 lbs. 7.95 • —
l.c.l., frt. equald 100 lbs. 7.25 • —
tribasic anhyd., bgs., c.l., t.l., frt. equald 100 lbs. 8.45 • —
l.c.l., frt. equald 100 lbs. 8.85 • —
cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.20 • —
l.c.l., frt. equald 100 lbs. 4.60 • —
Sodium phosphates in dms., 60c. higher than bgs.
Prussiate, yellow (see sodium ferrocyanide).
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lbs. 10.75 • —
ferric, dms., 1,500-lb. lots, works, lb. .31 • —
smaller lots, works lb. .32 • —
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.37½- —
l.c.l., frt. equald 100 lbs. 7.77½- —
Salicylate, USP, dms. lb. .68 • .71


LOWER COST?
DRYMET—anhydrous sodium metasilicate—provides more detergent power per pound and more real power per dollar.

Got a Detergent Compounding Problem?

DRYMET

WILL HELP YOU SOLVE IT—

and COWLES Know-How will Help, too

BETTER DETERGENCY?

DRYMET puts more genuine colloidal punch into your cleaning compounds. More soil-loosening. More soil-dispersing action.

- Years of diversified experience in detergent manufacture—
- Well equipped, expertly staffed detergent research laboratories—
- Available to help you use DRYMET more effectively

Send for this DRYMET file folder

- Chemical and physical Properties of DRYMET
- Recommended Detergent Formulations with DRYMET
- Individual suggestions for improving your products

pH CONTROL?

DRYMET buffers alkali hydroxides, carbonates, phosphates, soaps, synthetics. Pegs the pH were you want it.

Cowles CHEMICAL COMPANY

7018 Euclid Ave. • Cleveland 3, Ohio

Sodium sesquicarbonate, bgs., c.l., works lb. 2.10 - —
l.c.l., dlvd., zone 1 ... 100 lbs. 3.85 - 4.10
zone 2 ... 100 lbs. 4.10 - 4.33
zone 3 ... 100 lbs. 4.40 - 4.65
zone 4 ... 100 lbs. 5.10 - 5.35
Sesquisilicate, hydrated, bgs., c.l., works 100 lbs 4.60 —
l.c.l. works ... 100 lbs. 4.95 5.35
dms c.l., works ... 100 lbs 5.00 —
l.c.l., works ... 100 lbs. 5.35 - 5.75

Sales zones are: (1) All States E of Miss. R and N of south bounc- of Ky and Va.; Ala La; and Miss. south of 31° Tex E. of 100°; S. of 31° Fla.; also Me. N. H and Vt., in which there are special county zones: Davenport, Ia and St Louis. (2) Ark E of 98° Ga.; Iowa (except Davenport), Minn., Mo (except St Louis), Neb., E of 98° N C. S. C., Tenn and Tex N. of 31° and E of 100° (except Wichita Falls); also Ala La and Miss No of 31°; (3) Ark W of 98° Kan. Neb W of 98°; N D., Okla., S D., Tex., W of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N M., Utah Wyo. and El Paso Tex.

Silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works 100 lbs. 1.35 - —
l.c.l., works 100 lbs. 1.70 2.20
tanks, works 100 lbs 1.00 —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 1.95 —
l.c.l., dms., works 100 lbs. 2.55 - 2.80
tanks, works 100 lbs. 1.10 - —
52° Be., turbid, 1:2.4, dms., c.l., works 100 lbs. 2.30 - —
l.c.l., works ... 100 lbs. 2.65 - 3.15
tanks, works 100 lbs 1.95 —
solid, 1:3.2, bgs., works ton.57.50 - —
Silicofluoride bgs., c.l. works lb. .07 - —
l.c.l. works lb. .07 08
Sodium silicofluoride in dms. 4.10c higher
Stannate dms works frt alld. E lb. .539 - .593
Sulfa drugs (see Sulfa name)
Sulfanilate, bbls., works ... lb. .22 - —
Sulfate, NF, VII, dried, powd., dms lb. .22½- —
tech. anhyd. bgs. c.l. dlvd. E ton.52.00 - —
detergent grade, bgs., c.l., works ton.34.00 - —
rayon grade bgs. c.l. works. ton.31.00 - —
USP cryst fib dms lb. 17½ 18
gran. fib. dms lb. 17½ 18
Sulfide flake dms., c.l. works, E., frt, equald lb. .05¼ - —
l.c.l., same basis lb. 05¾ - —
fused, bbls. c.l. works E. fre equald lb. 04¾ - —
l.c.l., same basis lb 05¼ - —
anhyd., bgs., c.l ... 100 lbs. 3.00 - —
c.l. same basis 100 lbs 2.50 - —
powd., bbls., c.l., works 100 lbs 7.25 - —
l.c.l. works 100 lbs 7.50 - —
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .07½ - —
l.c.l., works ... lb. .07 - —
liq., 40-44%, tanks, works, 100% basis ton.110.00 - —
Sulfocyanide, CP, (see Sodium thiocyanate).
Tetraborate (see Borax)
Tetrasulfide, liq., 40%, dms., c.l., works lb. .03½- —
l.c.l. works lb .04 —
Thiocyanate, CP, dms ... lb. .55 - .63
tech., anhyd., 1 ton lots or more, works lb. .317 - —
less than ton lot, works lb. .337 - —
Thiosulfate, NF, cryst., bbls lb. .12½- —
tech (see Sodium hyposulphite).
Titanate, ctns., c.l., works .. lb. .10½- —
5-ton lots, works ... lb. .10¾- —
1-ton or less, works ... lb. .11 - —
Toluene sulfonate, dms., c.l., or t.l. lb. .38 - —
l.c.l. ... lb. 42 - —
Trichloracetate, 90%, 100-lb. dms., c.l., frt. alld. E lb. .37½- —
l.c.l., frt. adjusted, E lb. .39½- —
50 lb. dms., c.l., frt. alld E. lb. .38 - —
l.c.l., frt. adjusted E . lb. .40 - —
10-lb. cns., c.l., frt. alld. E. lb. .44 - —
l.c.l., frt. adjusted E ... lb. .46 - —

Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.

Tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.72½- —
l.c.l. same basis ... 100 lbs. 8.12½- —
Trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 - —
l.c.l., works ... 100 lbs. 9.40 - 9.80
dms., c.l., works ... 100 lbs 9.05 - —
l.c.l., works ... 100 lbs. 9.80 -10.20
Tungstate, tech., kgs., dlvd. E lb. 1.80 - —
Sodium-ammonium phosphate, bbls., works, frt. equald lb .23 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
l.c.l., same basis ... lb. .21½- —
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works lb. .28 - —
smaller lots same basis lb .30 - —
Solvent naphtha, coaltar, high flash, tanks, works gal. .31 - .35
petroleum (see Petroleum solvent, partial aromatic).
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 - —
10,000 to 20,000-lb. lots, works, lb. .34 - —
smaller lots, works lb. .37 - .39
Tristearate, fib. dms., 20,000-lb. lots works lb. .33 - —
10,000 to 20,000-lb. lots, works. lb. .35 - —
smaller lots works lb .38 - .40
Sorbitol, cryst., pellets, dms., c.l., works lb. .30 - —
1 to 5-ton lots, works lb. .32 - .33
powd., dms., 1 to 5-ton lots, works lb. .38 - .39
soln., comi., aqueous, dms., c.l., works lb. .24¼- —
ton lots works lb. .25 - —
smaller lots, works .. lb. .25¼- —
tanks works lb. .23¼- —
reg., 70%, aqueous dms., c.l., works lb. .16 - —
ton lots works lb. .16¾- —
smaller lots, works lb. .17 - —
tanks, works lb. .15 - —
Soybean meal, 44%, bulk, Decatur. ton.54.00 -55.00
protein, chemically isolated, bgs., c.l., works lb. .23 - —
mechanically refd., bgs., c.l., works lb. .06 - —
Sparteine sulfate, cns ... oz. .80 - .85
Spearmint leaves, dom., bls ... lb. .75 - —
imp., bls ... lb. 1.25 - —
Spruce extract, liq., reg. tanks, works lb. .01¾- —
powd., super, bgs., c.l., works. lb. .05¼- —
l.c.l works ... lb .05½- —
Squill, white, bls ... lb. .17 - .19
powd., bbls. bxs ... lb. .18 - .21
St John's bread, edible, bls .... lb. .13 - .15
Stannic chloride, anhyd., dms., works lb. .752 - .762
Oxide, dms., dlvd. E ... lb. .93½- .94½
Stannous chloride, anhyd., dms., works lb. .805 -1.074
Hydrous (crystals), dms., works, works lb. .76 - .77
Sulfate, dms., works ... lb. .924 - .944
Starch, corn, pearl, paper bgs., c.l. 100 lbs. 7.14 - —
l.c.l. ... 100 lbs. 7.29 - —
powd., paper bgs., c.l 100 lbs. 7.26 - —
l.c.l. ... 100 lbs. 7.41 - —

Prices for corn starch in cotton bags, 25c. per 100 lbs. higher.

Potato, dom., Idaho, bgs., c.l., works lb. .07¾ Nom.
Maine, bgs., c.l., works lb. .07¼ —
l.c.l., spot ... lb. .03¾ 09
Rice, bgs., l.c.l. lb. .15½ 16
Wheat bgs lb 0755 0780
Star root (see Helonias root)
Stargrass Root (see Aletris root)
Stavesacre seed, bgs lb. 60 61
Stearine oleo (see Oleostearine)
Stomach substance, not USP 100 lb fib. dms lb. 2.80 —
Stramonium leaves, bgs lb 18 20
Streptomycin hydrochloride, bulk, gram. .10 —
gram. .10 —
Strontium bromide, NF, ens., dms. lb. .77 78
Carbonate, pure, dms. 5-ton lots or more, works lb. .35 —
1-ton lots, works lb. .37 - —
tech., dms., works lb. .19 —
Chromate, bbls., works lb. 46 —
Iodide, jars, 25-lb lots lb 3.42 —
Nitrate, bbls., c.l., works 100 lbs 11.00 —
l.c.l., works 100 lbs.12.00 —
Salicylate, NF, dms lb 1.65 —
Sulfate, air floated, 90%, 325 mesh, bgs., works ton.56.70 -66.15

Strophanthin, K, bots oz 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 3.75
Styrax, USP, cs lb 78 80
Strychnine NF powd. cns. 100-oz. lots oz 1.10 —
Phosphate, NF, cns. 100-oz lots oz 1.14 —
Sulfate USP, cryst., cns., 25-oz. lots oz .96 —
powd. 100-oz. lots oz. .85 —
Styrene monomer, polymer grade, 99½% dms., c.l., frt equal'd. lb. .22¼ —
l.c.l., same basis lb. 23¼ —
tanks, same basis lb. 21 —
synthetic rubber grade 99% dms., c.l., frt equald lb. .19¼ —
l.c.l., same basis lb. .20¼ —
tanks, same basis lb. 18 —
Styrolyl acetate, bots lb 1.65 1.70
Sucrose, crude, bgs., works lb. .0545- —
refd., white, bgs., refy., E lb. .0555- —
Octaacetate, denaturing grade, 100-200-lbs bgs. l.c.l works lb 76 —
Sugar, raw (see Sucrose crude).
Sulfanilamide, dms lb. 4.00 4.50
Sodium, dms lb. 4.10 4.60
S. facetamide, fib. dms lb. 4.00 4.20
Sodium fib. dms lb 5.00 5.20
Sulfadiazine, USP, microcrystals, dms lb.10.10 -11.10
powd., dms lb.10.25 -10.75
Sulfadiazine-sodium, USP dms lb 11.25 11.75
microcrystals, dms lb 10.60 11.10
Sulfaguanidine USP dms lb 2.50 —
Sulfamerazine, USP, microcrystals lb 10.65 -11.15

Sodium Sesquicarbonate—Sulfur, Refd.

Sulfamerazine-sodium USP dms. lb 11.25 11.75
Sulfamethazine microcrystals, dms., lb. 8.90 9.40
powd., dms lb 8.50 9.00
Sulfanilamide USP (30-60 mesh, dms lb 1.80 1.90
microcrystals dms lb 1.70 90
powd. dms lb 1.70 1.90
Quinoxaline, veterinary, dms lb. 6.30 6.75
Sulfapyridine NF powd bots tins lb 7.00 7.50
Sulfapyridine-sodium monohydrate dms lb 7.50 8.00
Sulfathiazole USP microcrystals dms lb 2.85 3.00
powd. dms lb 2.70 2.85
Sulfathiazole-sodium, USP, dms lb 2.75 2.90
Sulfur coml flour bgs. mines 100 lbs 3.05 —
bbls mines 100 lbs 3.20 —
lump bgs mines 100 lbs 2.20 —
bbls mines 100 lbs 2.65 —
crude bulk c.l. mines contract, ... 2.50 —
export, f.o.b. vessels Gulf ports long-ton 34.00 35.00
domestic and Canada, f.o.b. vessel Gulf ports, long-ton 28.00 29.50
refd., flowers, USP, bgs., mines 100 lbs. 4.00 - —
bbls 100 lbs 5.15 —
flour, light, bgs., mines 100 lbs 3.60 —
bbls. mines 100 lbs 4.50 —
lump bgs. mines 100 lbs 3.20 —
rolls, bgs., mines 100 lbs 3.65 - —
bbls, mines 100 lbs 4.40 —
salt block bgs mines 100 lbs 3.50 —
virgin block, bbls. mines 100 lbs. 3.45 —

Sodium Tripolyphosphate

Tetrasodium Pyrophosphate
ANHYDROUS

Sodium Polyphos
(SODIUM HEXAMETAPHOSPHATE)
(SODIUM TETRAPHOSPHATE)

Trisodium Phosphate
CRYSTALLINE
MONOHYDRATE

Sodium Phosphates

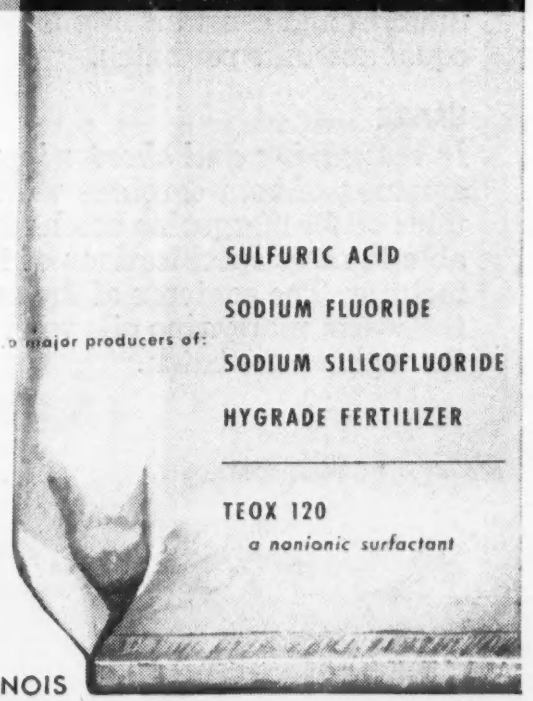
BLOCKSON

Trisodium Phosphate
Chlorinated

Disodium Phosphate
ANHYDROUS
CRYSTALLINE

Monosodium Phosphate
ANHYDROUS
MONOHYDRATE

Sodium Acid Pyrophosphate



... major producers of:
SULFURIC ACID
SODIUM FLUORIDE
SODIUM SILICOFLUORIDE
HYGRADE FERTILIZER

TEOX 120
a nonionic surfactant

BLOCKSON CHEMICAL COMPANY • JOLIET, ILLINOIS

NEWS from ROCHE

Beta CAROTENE 'Roche'

(an exclusive Roche development)

ADVANTAGES for food processors

NATURAL COLORING

Beta carotene is the natural coloring matter of butter and other dairy products and is a constituent of cereal grains, alfalfa, carrots, and other vegetation. 'Roche' beta carotene imparts a *true* natural yellow color without any tinge of green. It does not change to a reddish color as do some vegetable pigments during storage.

ADDS NUTRITIONAL VALUE

Theoretically, one gram of pure beta carotene is equivalent to 1.67 million U.S.P. units of vitamin A. High retention of beta carotene-vitamin A activity is achieved in baked goods and other foods when margarine and shortening containing added beta carotene 'Roche' are used.

COLOR STABILITY

Extensive laboratory data show excellent color stability of margarine, butter, shortening, cheese, edible oils and yellow bakery products which were colored with beta carotene 'Roche'.

UNIFORMITY

The high degree of purity and color stability ensures uniform and constant intensity of color when using equal amounts per batch.

USAGE

In margarine and shortening. Canned measured amounts of beta carotene with vitamin A in vegetable oil for margarine batch requirements are available to meet specifications of the margarine manufacturer. The contents of the can dissolve readily in the warm margarine oils with uniform distribution throughout the batch.

A semi-solid stable suspension of beta carotene i vegetable oils containing 400,000 U.S.P. units vitamin A activity per gram dissolves quickly i warm margarine oils or warm fluid shortening whe added separately from the vitamin A concentrat This addition contributes a uniform distribution color and a substantial amount of vitamin A.

The amount of beta carotene customarily used t color one pound of margarine is generally in th range of 5000 to 6000 U.S.P. units of vitamin activity. The amount required to color a pound shortening represents 8000-9000 units.

In butter. Beta carotene may be used to improv the low color and vitamin A level of winter butte A stable suspension of beta carotene in butter o containing 500,000 U.S.P. units of vitamin A activit per gram is available for butter processing.

In cheese. Beta carotene has greater advantages tha other colors permitted in cheese in that beta caroten is the natural coloring in dairy products and co tributes vitamin A.

In bakery and confectionery products. Beta caroten is easily introduced into most bakery and some co fectionery products by incorporating the require amount of beta carotene suspension with the ma garine, butter or shortening.

Other foods. Detailed information about the appl cation of 'Roche' beta carotene on request.

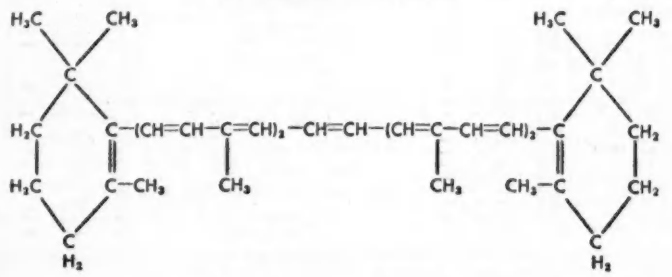
for processors of { Margarine · shortening
butter · cheese
yellow baked goods
edible oils

now in commercial production

TECHNICAL information

Empirical Formula: $C_{40}H_{56}$

Structural Formula:



Crystalline beta carotene 'Roche' is in the all trans form

Molecular Weight: 536.85

Melting Point: 183.0

Appearance: Red-violet platelets

Solubility in Edible Oils:

At room temperature.....about 0.08%
At 60°C .....about 0.2 %
At 100°C .....about 0.8 %

Biological Properties:

0.6 microgram beta carotene: 1.0 U.S.P. unit of vitamin A

1.0 gram beta carotene: 1,666,666 + U.S.P. units of vitamin A

Color-Vitamin A Relationships

Margarine. The amount of beta carotene required to produce an acceptable color in margarine ranges from 0.0030-36 grams (5000-6000 U.S.P. units of vitamin A activity) per pound.

Shortening. The average amount required to color shortening is 0.0051 grams (8500 U.S.P. units of vitamin A activity) per pound.

Butter. Acceptable butter color, especially in winter butter can usually be obtained by adding 0.0006 to 0.0030 grams beta carotene (1000-5000 U.S.P. units vitamin A activity) per pound.

PACKAGING

33-pound steel pails, double Synthetasine lined, with removable-replaceable-leverlok cover.

3-pound tripletite tamperpruf metal cans.

Batch size cans of Vitamin A and Beta Carotene 'Roche' blended in vegetable oil to your specifications.

24% Semi-solid Suspension of Beta Carotene 'Roche'
400,000 U.S.P. units per gram
'Roche' beta carotene in vegetable oils.

call ROCHE for vitamins

VITAMIN DIVISION • **HOFFMANN-LA ROCHE INC.** • NUTLEY 10, NEW JERSEY
NUtley 2-5000

Pacific Coast distributor: L. H. BUTCHER COMPANY, San Francisco • Los Angeles • Seattle • Portland • Salt Lake City
In Canada: Hoffmann-La Roche Ltd., 286 St. Paul Street, West; Montreal, Quebec

Sulfur, Rubbermakers—Triethylene Glycol

Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs. 2.40 - —
bbls., mines 100 lbs 3.35 - —
98.00% passing through 325 mesh, bgs., mines 100 lbs 4.30 - —
bbls. mines 100 lbs 3.15 - —
refd., bgs., mines 100 lbs 3.55 - —
bbls mines 100 lbs 4.50 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs 2.70 - —
bbls mines 100 lbs 3.85 - —
10% pine tar, bgs., mines 100 lbs 3.50 - —

Dichloride, dms., c.l. works, frt equaled lb 03¾ - —
c.l. same basis lb 04½ - —
tanks, same basis lb 03½ - —

Dioxide, liq, coml cyls., works, frt equald lb .10 - .12
multi units cars, works lb 0.35 - —
tanks, works lb 045 - —
refrigeration cyls., dlvd lb .27 - —

Monochloride 55 gal. drms., c.l. frt equald lb 03¾ - —
c.l. same basis lb 04½ - —
tanks same basis lb 03½ - —

Sumac leaves 28%, bgs., ex-dock, ton 132.00 - —
ground, bgs., ex-dock ton 127.00 - —

Superphosphate run-of-pile under 22% a.p.a. pulv. bulk, c.l., works, allowing 88 - 91
Carteret, N. J. unit-ton .88 - .91
triple, 45% or more, a.p.a., pulv., bulk c.l. East Tampa, Fla. unit-ton 98 - —

T

2,4,5-T, dms., c.l., works, frt equald lb 1.25 - —
l.c.l. same basis lb 1.30 - 2.30
isopropyl, ester, dms., c.l., works, frt. equald lb 1.30 - —
l.c.l., works lb 1.35 - —

Talc, dom., ord., Calif., grd., bgs., c.l. works ton 32.00 -38.50
Vermont off color grd., bgs., c.l. works ton 18.40 - —
l.c.l., works ton 36.00 - —
fibrous, New York, grd., bgs., c.l., works ton 27.00 -32.00
l.c.l., works ton 30.00 -35.00
99.5%, 325 mesh, bgs., c.l., works ton 30.00 - —
l.c.l., works ton 33.00 - —
99.95% micronized, bgs., works ton 37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton 20.00 -35.00

Tallow, edible, tanks, dlvd. lb .10¾- —
inedible, extra, tanks, dlvd lb .07 - —
fancy, bleachable, tanks, dlvd. lb .07¼- —
No. 1, tanks, dlvd lb .06¾- —
special, tanks, dlvd lb .06¾- —
sulfonated, 25%, bbls., l.c.l. lb .07¾- .08
50% bbls., l.c.l. lb .09 - .10¾

Tankage, animal, feeding, 9-11% ammonia, bulk unit-ton 5.00 - —
Chicago unit-ton 5.00 - —

Tapioca flour, Brazilian, ex whse, bgs lb .08¼- .09
Siamese, top grade, ex whse lb .07½- .07¾

Tar acid oil, 15-18% dms., c.l., ex equald gal .47 - .49
l.c.l. same basis gal .50 - .51
tanks, same basis gal .39 - —
25-28% dms c.l. same basis, gal .54 - .56
l.c.l. same basis gal .57 - .58
tanks, same basis gal .46 - —
50-53% dms c.l. same basis, gal .70 - .72½
l.c.l. same basis gal .73½ - .74½
tanks, same basis gal .62½ - —

Coal (see Coaltar)

Tartar, emetic (see Antimony-potassium tartrate).

Terpine glycol ether dms., c.l., works lb .23½- —
l.c.l., works lb .25½- —
tanks works lb .22 - —
Hydrate, NF, cryst., powd., fib. dms lb .67½- .74

a-Terpineol dms, l.c.l. dlvd E lb 19 - —

Terpineol, coml, dms., c.l., South. lb .13½- —
l.c.l., South lb .14 - —
extra dms lb 41 - 60
prime, dms lb .30 - .45

Terpinyl acetate extra cns., dms lb 60 - 75
prime dms lb 55 - 70
Propionate dms lb 1.75 - 2.00

Terra alba (see Gypsum)

Testosterone, USP, 100-gm lots, bots gram .70 - —
Propionate USP 100-gm lots, bots gram .68 - —

Tetrachloroethane dms., works lb .14½- —

Tetrachloroethylene, tech (see Perchloroethylene).
USP 55 gal dms, works lb .20½- .21½
smaller dms., works lb .23½ - .25

Tetraethyl orthosilicate, dms., c.l., dlvd. E lb .64 - —
l.c.l. dlvd E lb .65 - —
Pyrophosphate 40%, cns., dms., frt equald lb .69 - —

Tetraethylenepentamine, dms., c.l., dlvd. E lb .57½- —
l.c.l. dlvd. E lb .58½- —
tanks, dlvd E lb .56 - —

Tetrapotassium phosphate (see Potassium phosphate)

Tetrasodium pyrophosphate (see Sodium pyrophosphate).

Thallium metal dlvd lb 12.50 -15.00
Sulfate 99% bots, dlvd lb 8.00 -13.00

Theobromine, NF, fib dms lb 3.75 - —
And sodium acetate USP, fib dms lb 4.05 - 4.10
Sodio-Salicylate, NF, fib, dms lb 3.35 - 3.40

Theophylline, anyhd or USP, 100-lb. dms lb 3.65 - —

Thiamine hydrochloride, USP, regular or ampul type, fib, dms. kilo 100.00 - —
Mononitrate, USP, fib, dms kilo 100.00 - —

Thiocarbanilide, dms lb .50 - .52

Thiodiphenylamine (see Phenothiazine).

Thiourea, tech., dms., c.l., works lb .40 - —
l.c.l., works lb .42 - —

Thorium nitrate, purif., fib, dms., 100-lb. lots or more, works lb 3.50 - —

dl-Threonine, bots, 1-kilo lots kilo 450.00 -500.00

Thyme leaves, French, bgs lb .20 - —
Spanish, bgs. lb .09½- —

Thymol, fib, dms lb 2.50 - 2.65
Iodide, NF, dms lb 7.30 - —

Timbo root (see Cube root)

Tin chloride (see Stannous chloride, anhydrous)
crystals (see Stannous chloride, hydrous).

Metal (Straits) lb .91½- —

Oxide (see Stannic oxide).

Sulfate (see Stannous sulfate).

Tetrachloride anhyd. (see Stannic chloride, anhydrous)

Titanium dioxide anatase, chalk resistant, bgs., c.l., dlvd lb .22½- —
l.c.l., dlvd lb .23½- —
ceramic bgs., c.l., dlvd lb .22½- —
l.c.l., dlvd lb .23½- —
reg., bgs., c.l., dlvd lb .22½- —
l.c.l., dlvd lb .23½ - —
hydride cns., works lb 7.95 - 9.00

Metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla.ton, Niagara Falls, N. Y. .120 - —
ton 137.50 - —
5-ton lots, same basis ton 142.50 - —
ton lots, same basis ton 147.50 - —

Milled titanium dioxide $7.50 per ton higher

rutile, non-chalking bgs., c.l., dlvd E lb .24½- —
l.c.l. dlvd E lb .25½- —
Pigment, calcium-rutile base, bgs., c.l., dlvd lb .08¾- —
l.c.l. dlvd lb .08¾- —
Tetrachloride, tech., dms., c.l., works lb .40¾- —
l.c.l. works lb .43¾- —
tanks, works lb .39¾- —

dl-a-Tocopherol, bots kilo 149.65 - —
Acetate, bots kilo 136.00 - —

o-Tolidine base, dist., kgs lb 1.30 - —

Tolu balsam, cns lb 4.25 - 4.50

Toluene (see Toluol).

p-Toluenesulfonamide, flake, dms., frt. alld lb .64 - .66
powd. dms., works lb .70 - —
solid, dms., frt. alld lb .61 - —

m-Toluidine, dms., c.l., works, frt. alld lb .79 - —
l.c.l. same basis lb .80 - —
tanks, same basis lb .78 - —

o-Toluidine, dms., c.l., works, frt. alld lb .23 - —
l.c.l., same basis lb .24 - —
tanks, same basis lb .22 - —

p-Toluidine, flake, dms., frt. alld lb .64 - —
solid, dms., frt. alld lb .60 - .61

Toluol, coaltar, indust. or nitration, tanks, works:—
Bethlehem, Pa gal .34 - —
Birmingham dist gal .32 - —
Chicago dist gal .35 - —
Cleveland dist gal .32 - —
Geneva, Utah gal .26 - —
Johnstown, Pa. gal .32 - —
Lackawanna, N. Y. gal .35 - —
Lone Star, Tex gal .33 - —
Lorain, Ohio gal .32 - —
Middletown, Ohio gal .33½- —
Minnequa, Colo. gal .32 - —
Philadelphia district gal .34 - —
Pittsburgh dist gal .32 - —
Sparrow's Point, Md gal .34 - —
Terre Haute, Ind gal .35 - —
Youngstown, Ohio gal .32 - —

Toluol, petroleum, indust., 2° tanks, works:—
Albany, N. Y. gal .35 - —
Bayonne, N. J. gal .34 - —
Baytown, Tex. gal .33 - —
Chicago, Ill. gal .35 - —
Detroit, Mich gal .35 - —
Houston, Tex. gal .35 - —
Philadelphia, Pa. gal .34 - —
Providence R. I. gal .35 - —
Wood River, Ill. gal .35 - —

2,4-Tolylenediamine, cryst., fib., dms., frt. alld lb .94 - —
powd., same basis lb 1.00 - —

Tonka beans, Angostura, cks. lb 1.65 - 1.80
Brazilian, Surinam, cs lb 1.00 - 1.25

Totaquine, 100-oz. lots, cns oz. .42 - —

Toxaphene, dms., c.l., t.l., works. lb .20 - —
l.c.l., l.t.l., works lb 26 - —

Triacetin, dms., c.l., dlvd, E. of Rockies lb .39 - —
l.c.l. same basis lb .40 - —
tanks, same basis lb .37 - —

Tributyl citrate, tech., non-ref. dms., c.l., frt. alld. E. of Denver lb .42 - —
l.c.l., frt. alld. E. of Denver, lb .43 - —
tanks, frt. alld. E. of Denver, lb .40 - —

Phosphate, dms., c.l., works lb .52 - —
l.c.l. same basis lb .53 - —
tanks, same basis lb .50 - —

Tributylamine, dms., c.l., works lb .67 - —
l.c.l., same basis lb .68 - —
tanks, same basis lb .65 - —

Trichlorobenzene, dms., c.l., works, frt. alld E lb .14½- —
l.c.l., frt. alld. E lb .15½- —
tanks, frt. alld. E lb .13 - —

Prices in the West 1¾c. higher.

Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb .11¼- —
l.c.l., dlvd. E lb .13½- —
tanks, works, frt. equald lb .10¼- —

Trichloroethane, dms., c.l., works, lb .15 - —
l.c.l., works lb .13½- —
tanks, works lb .11½- —

Tricholine citrate, 65% soln., ref. cbys., works, frt. adjusted lb 1.40 - 1.45

Tricresyl phosphate, coaltar, dms., c.l., dlvd lb .35 - —
l.c.l. dlvd. lb .36 - —
tanks, dlvd lb .33 - —
petroleum dms., c.l., dlvd lb .35 - —
l.c.l. dlvd. lb .36 - —
tanks, dlvd. lb .33 - —

Triethanolamine, dms., c.l., dlvd. E lb .23½- —
l.c.l., same basis lb .24½- —
tanks, same basis lb .21½- —

Triethylamine, dms., c.l., works, dlvd. E lb .47 - —
l.c.l., same basis lb .48 - —
tanks, same basis lb .45 - —

Triethyl citrate, refd., tech., non-ref. dms., c.l., frt. alld. E. of Denver lb .45¾- —
l.c.l., frt. alld. E. of Denver, lb .46¾- —
tanks, frt. alld. E. of Denver, lb .43¾- —

Phosphate, dms., c.l., works lb .38 - —
l.c.l., same basis lb .39 - —
tanks, same basis lb .37 - —

Triethylene glycol, dms., c.l., dlvd E. lb .19¾- —
l.c.l., same basis lb .20¾- —
tanks, same basis lb .18 - —

Triethylenetetramine, dms. c.t., dlvd E lb. .48½- —
l.c.l., dlvd. E lb. .49½- —
tanks, dlvd. E lb. .47 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .22¾- —
l.c.l., dlvd. E lb. .23¾- —
tanks, dlvd. E lb. .20¾- —
Trimethylamine, 25-40% soln., dms., c.l., works, frt equald., 100% basis lb. .42 - —
l.c.l., works, frt. equald, 100% basis lb. .42½- —
tanks, works, frt. equald, 100% basis lb. .33 - —
Tripentaerythritol bgs. l.c.l., works, lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .40 - —
Triphenylguanidine, bbls. works in. .90 - —
Tripropylene glycol, dms., c.l., frt. alld. E. lb. .19¾- —
l.c.l. frt alld E lb. .20¾- —
Prices 1c per lb. higher in West.
Trisodium fluoroacetate (see Sodium fuloroacetate, tribasic).
Phosphate (see Sodium phosphate tribasic).
Trypsin, pharmaceutical 1:7, dms., works lb. 6.25 - —
dl-Tryptophane, fib ctns. works, kilo.165.00 - —
Tungsten metal, powd. 96.8%, dms., dlvd. lb. 4.35 - 4.40
Turpentine, gum (see Protective Coatings market, Naval Stores).
Tyrothricin, USP, bots gram .75 .85

U

Unicorn root, false (see Helonias root).
True (see Aletris root).
Urea, dom., 46% N, bgs., c.l., t.l., dlvd. zone 1 ton.120.00 - —
l.c.l., ex whse., zone 1 ton.140.00 - —
45% N, bgs., c.l., (30 tons), zone 1, dlvd. ton.137.00 - —
Zone 2, dlvd. ton.153.00 - —
Zone 1 prices are basis delivered Kan., Neb., N. Dak., Okla., S. Dak., Tex. and E. Zone 2 prices include all states west of Zone 1.
Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W. Va. ton.128.00 - —
C grade, tankcars, same basis, ton.126.50 - —
37 grade tankcars, same basis, ton.155.50 - —
Urethane, USP, dms. lb. 1.50 - —
Uva ursi leaves, bls. lb. .12 - .14

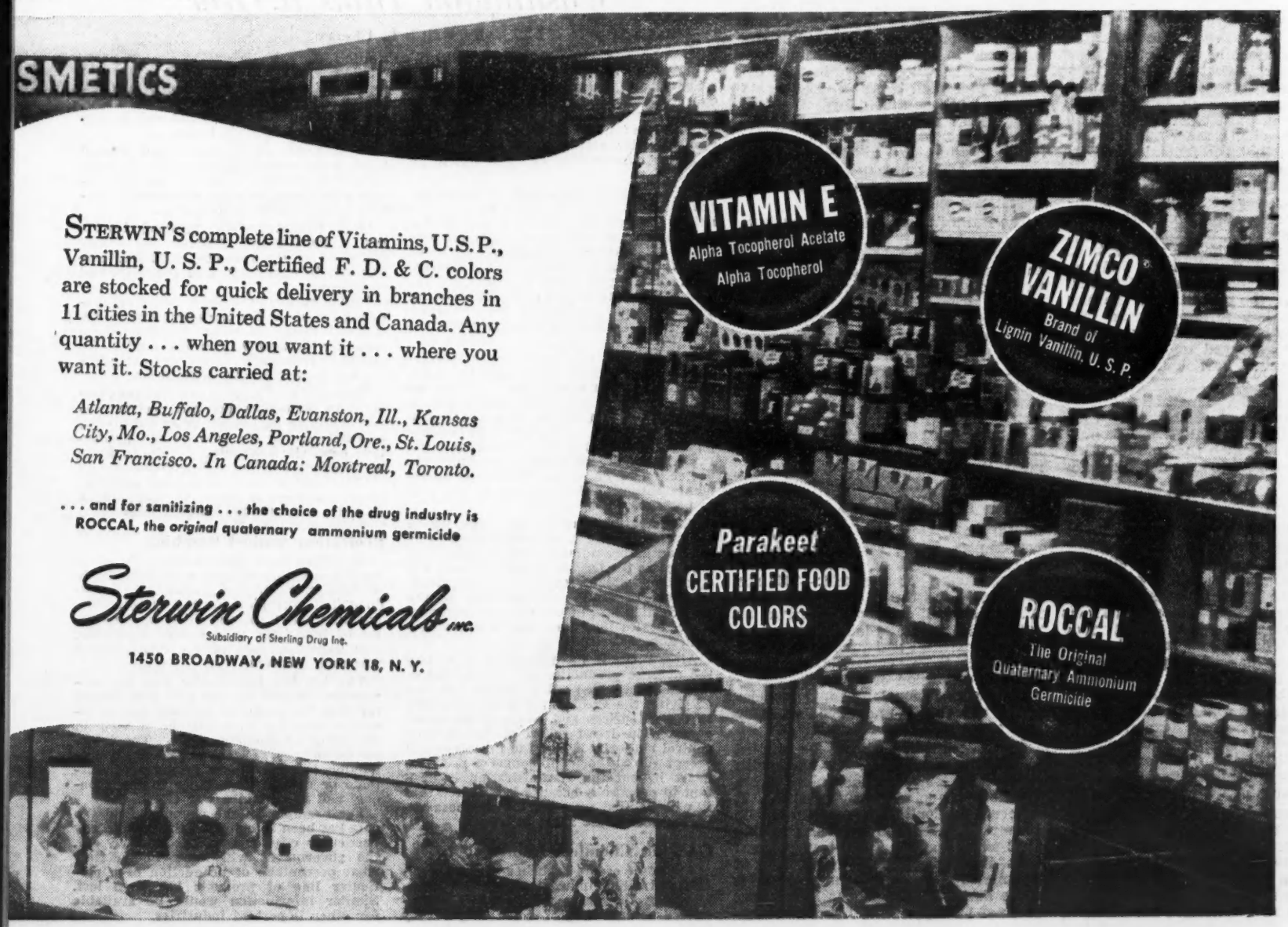
V

Valerian root, Belgian, bgs. lb. .38 - .40
dl-Valine, dms., works lb.21.00 -27.50
Valonia beards, 40-42% tannin, bgs., exdock. ton.66.00 -68.00
cups, 28-30% tannin, bgs., exdock. ton.46.00 -48.00
extract, powd., 63% tannin, bgs., ex-dock, duty extra lb. .08 - .08¼
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vanilla beans, Bourbon, tins lb. 8.25 - 8.75
Mexican, cuts, tins lb. 9.00 - 9.50
whole, tins lb. 9.75 -10.00
Tahiti, cs. lb. 7.60 - 8.00
Vanillin, ex eugenol, tins, 25-lb. lots, lb. 6.50 - 6.75
smaller lots lb. 6.90 - 7.25
ex guaiacol, tins, 25-lb. lots lb. 3.00 - —
smaller lots lb. 3.05 - 3.15
ex lignin, tins, 25-lb. lots lb. 3.00 - —
smaller lots, tins lb. 3.05 - 3.15
Vinyl acetate monomer, 55-gal. dms., c.l., dlvd. E lb. .18½- —
l.c.l., dlvd. E lb. .19½- —
tankcars, dlvd. E lb. .16½- —
tanktrucks, dlvd. E lb. .17½- —
n-Butyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Chloride monomer, tanks, frt. equald lb. .10½- —
Ether, USP anesthesia, nats., 50 c.c., hospitals, hot lb. 1.12 - —
75 c.c. bot. 1.56 - —
Ethyl ether, tech., dms., c.l., works lb. .26 - —
l.c.l., works lb. .28 - —
tanks, works lb. .25 - —
Isobutyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l. works lb. .30 - —
tanks, works lb. .27 - —
Methyl ether, cyls., works lb. .23 - —
tanks, works lb .20 - —
Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made.
Trichloride (see Trichloroethane).
2-Vinylpyridine, dms., works lb. 1.40 1.5
Vinyltoluene, dms., c.l. works lb. .20¼ —
l.c.l. works lb. .21¼ —
tanks, works lb. .19 —
Viosterol in alcohol, 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units, .025 - —
lots of 1 billion USP units, 1,000,000 units, .03 - —
lots of less than 1 billion USP units, 1,000,000 units, .035 - —
in nat. vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units, .02 - 04¾
lots of 1 billion USP units, 1,000,000 units, .025 - 05¼
lots of less than 1 billion USP units, 1,000,000 units, .03 - 05¾
Vitamin A acetate, syn., crystalline, beads, 500,000 A units per gram, gram, .07¼- —
dry, 500,000 units per gram, kilo lots kilo.72.50 - —
325,000 units per gram, same basis kilo47.10 - —
250,000 units per gram, same basis kilo.36.25 - —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
liq., in oil, 1,000,000 A units per gram, 1,000,000 units, .12 - —
Palmitate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units, .12 - —
in oil, 1,000,000 A units per gram, 1,000,000 units, .12 - —
Vitamin B (see Thiamine hydrochloride).
B_2 (see Riboflavin).
B_{12}, complex, natural (see Rice bran concentrate and Yeast).
B_6 (see Pyridoxine hydrochloride).
B_{12}, crystalline, 1-gram or 5-gram vials gram.245.00 - —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram.185.00 - —
C (see Acid, ascorbic).
D (see Oils, codliver and fish-liver, Calciferol and Viosterol).
D_2, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
less than kilo lots kilo.45.00 - —
E (see a-Tocopherol and Oil, wheat germ).
G (see Riboflavin).
H (see Biotin).
K, Active (see Menadione).
K_1, 25 gram bots gram 4.50 - —
Violet methyl toner (see Blue methylviolet toner).
V M &P naphtha (see Petroleum naphtha).

W

Wahoo root, bark, bls lb. 2.50 Nom.
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - —
25-49-lb lots, N. Y. or Chicago, lb. 2.05 - —
5-24-lb. lots, cns., N. Y. or Chicago lb. 2.15 - —
Wattle bark, fair average, African, bales, ex dock ton.96.00 - —
merchantable, bales, ex dock ton.94.00 - —
extract, liq., 35% tannin, bbls., lb. .09¾- .10
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .09¾- —
S. Africa, 60% tannin, bgs., ex dock, duty extra lb. .10 - —
Wax, amorph. (see Wax microcrystalline).
Bayberry, bgs., spot lb. .40 - .43
Bees, crude, African, bgs lb. .65 Nom.
Brazilian, bgs. lb. .67 Nom.
Central American, bgs lb. .64 .65
Chilean, bgs. lb. .67 Nom.
refd., USP, bleached, white bricks lb. .74 - .76
slabs lb. .73 - .75
yellow, bricks lb. .67 - .68
slabs lb. .66 - .67
Candelilla, crude, bgs lb. .62 - .64
refd., bgs lb. .63 - .65
Powdered candelilla, 20 mesh, 7c. per lb. higher, 80 mesh, 7c.; 100-200 mesh, 8c.
Carnauba, chalky, bgs., ton lots lb. .56 - .58
North country No. 2, bgs., ton lots lb. .68 Nom.
No. 3, Ceara, crude, bgs., ton lots lb. .60 - .62
refd., pure, bgs., ton lots lb. .68 - .69
tech., bgs., ton lots lb. .64 - .65
Parnahyba, crude, bgs., ton lots lb. .62 - .64
yellow, No. 1, Ceara, bgs., ton lots lb. .95 - .97
Parnahyba, bgs., ton lots, lots lb. 1.01 - 1.03
Powdered carnauba wax price differentials same as powdered candelilla.
Wax, Japan, bgs. lb. .41 - .43
Microcrystalline 170-175° F.m.p., ASTM, penetration 15-20, ctns., 20,000 lbs., group 3, works lb. .13 - .14
smaller lots, same basis, lb. .14 - .15
black, ctns., 20,000 lbs., same basis lb. .11½- .12½
smaller lots, same basis, lb. .12½- .13½
white, ctns., 20,000 lbs., same basis lb. .24 - .25
smaller lots, same basis, lb .25 - .26
180°-185° F.m.p., ASTM, penetration, 7-11; amber, ctns., 20,000-lb. lots, same basis, lb. .16 - —
smaller lots, same basis, lb. .17 - —
black, ctns., 20,000 lbs., same basis lb. .14½- —
smaller lots, same basis, lb. .15½- —
white, ctns., 20,000 lbs., same basis lb. .27 - —
smaller lots, same basis, lb. .28 - —
190°-195° F., m.p., ASTM, penetration 2-7, amber, ctns., 20,000 lbs., same basis lb. .20 - —
smaller lots, same basis, lb. .20½- —
black, ctns., 20,000 lbs., same basis lb. .18 - —
smaller lots, same basis, lb. .18½- —
white, ctns., 20,000 lbs., same basis lb. .33½- —
smaller lots, same basis, lb. .34½- —
Montan, dom., refd., bgs. lb. .30 - .32
imp., crude, Bohemian, bgs lb. No prices.
German, bgs. lb. No prices.
Ouricury, refd., pure, bgs. lb. .90 - .92
tech., bgs lb. .85 - .87
Paraffin (see P).
Spermaceti, blocks, cs. lb. 25½- .31
cakes, cs lb 26½ .32
Sugar cane, dom., refd., slabs, works lb .65 .75
spot lb. .67¼- .72¼
White lead (see Lead, white).
White pine bark, rossed bls lb. 18 - .19
White precipitate USP, powd. dms. lb 6.55 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin nat., bls. lb. 18 .19
rossed, bls lb. 19 .22
Witch hazel bark, bls lb 16 .17
leaves, bls. lb 20 .21
Wollastonite, fine, bgs., c.l., works, ton 39.50 - —
l.c.l. ex whse ton 56.00 - —
medium, bgs., c.l., works ton 27.00 - —
l.c.l., ex whse ton 44.00 - —
Woolfat, crude (see Degras).
USP (see Lanolin).
Wormseed, American, bgs lb .20 .25
Levant, bgs lb 4.25 4.50

—Continued on page 70



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Help for Farmers

Students of economic conditions are largely inclined to admit that there are many farmers in the United States whose incomes are insufficient for their normal living needs. They are not so willing to accept the governmental efforts in farm help over recent years as providing a means of bettering the farmers' condition. In large part they are inclined to side with the leaders of the American Farm Bureau Federation and the National Grange who, for at least two years, have been expressing the opinion that price-fixing — plus crop quotas—does not get down to the basis of farm problems and that the situation calls for research, sales promotion, and improved practices which will cut the cost of marketing.

The persistent fight over parity and price-supports provides additional evidence that the role of government is mainly political, with a purpose of providing "fertilizer" wherever there is a possibility of promoting the production of a bigger crop of the proper type of votes. And there is reason to believe that any well-intentioned program of the administration is quite likely to be wrecked by nonconformist farm groups in which the popular process of political "fertilization" will be particularly effective.

The simple problem of many farmers is that they need more money—they are not alone in that respect. The simple answer to that problem is that they should work for it. But, there are a number of confusing complexities in that direction. The chief block is that the farmers do not know what to do. And so it is that the federal administration has come up with a scheme embracing such things as part-time employment by way of industrial expansion into needy rural areas, technical aid of various sorts, vocational training, and help from the Department of Health, Education and Welfare, along with financial loans. The best statement in the reporting of the new scheme is that farm, business (not specifically defined), and other leaders would be encouraged to develop self-help programs. Particulars have not been disclosed.

Quite naturally, something in that direction characterized the recent conference of the National Farm Chemurgic Council at which that organization changed its name to "Council for Agricultural and Chemurgic Research" and set up a new and expanded purpose of providing the farmer with "an unending supply of profitable production and marketing methods"; providing industry with "an unending supply of raw materials and an important market for its finished goods"; and providing the consumer with "a steadily improving standard of living evidenced by new foods and fibers at reduced costs."

In a strict semantic sense of the terms, neither "agricultural" nor "chemurgic" research reaches to that purpose. Research and technic in agriculture, as in many other areas, have got far ahead of the capabilities of those who should apply them most beneficially. Agriculture is too big productively. Its need for research is not in new methods or new crops but in new marketing.

It is a peculiar slant at the conditions of agriculture which one gets from reading in a newspaper item how small are the incomes of groups of small dairy farmers and in another item in the same issue how much the incomes of big dairy concerns have increased. The answer to that unbalance is a very simple one: agriculture should be a self-sufficient fully integrated business—the business whose leaders according to the governmental scheme referred to above would be encouraged to develop self-help programs. The opportunities in that direction presented by the developments in milk powders and dehydrofreezing, along with the well-known practices of canning and preserving, point clearly to the way in which low-income farmers can add substantially to their earnings by way of cooperative or community enterprises.

The farmer's financial salvation is in his own hands. It should be left there, and he should be enabled and encouraged to work it out. That will take some changing of views and attitudes. The fact that the recent chemurgic conference was attended by representatives of seventy-five corporations and but twenty-four persons from agricultural organizations is quite significant in that direction. The research purpose of the reconstructed council has a field which is still much broader and a goal which is still much higher than is set forth in the statement thereof.

What About World Trade

Next week will be "World Trade Week" in the United States—according to Presidential designation. What it will be otherwise is anybody's guess. It has been celebrated by ceremonies and other gatherings as an annual event for a number of years. World trade conditions today call for something different in the way of "appropriate observation" for which the president of the Chamber of Commerce of the United States has made a request, declaring that "healthy expansion of foreign trade is not only necessary to the strength of the free world, but is vital to the continued increase in our own standards of living."

Two years ago, the United States Council of the International Chamber of Commerce expressed a series of recommendations on the development of world trade policies and relations. It very wisely made the point that "such matters as raw materials, investments, military aid, technical assistance, export-import trade, and currencies be reached as a part of a common, unified program." It also said:—"We are grateful in the United States that our friends abroad express themselves as eager to be no longer longer dependent on governmental assistance and prefer to solve their economic problems through expansion of trade. We recognize the need for long-range policies which are clearly understood at home and abroad."

That declaration should be studied thoroughly by all those who agree with what the president of the United States chamber is quoted as saying above. It deserves particular study by those who have not yet reached an understanding that world trade is a two-way process; that its basic philosophy is one of partnership, not of patronage. It is quite likely that President Eisenhower will not be deprived of his current authority to promote such partnerships. United States business must assist in that promotion as a unity. Under today's conditions, it cannot take a chance through being self-divided. It has been given some measure of protective assurance in the new regulations under the antidumping law.

Two events of recent occurrence must be carefully studied in any purpose of making World Trade Week something more than a name. The more important one is the proclamation of the sovereignty of West Germany. That is an event of at least much economic potentiality commercially as politically. Because of the outstanding importance of the increasing demands for goods throughout western Europe, United States business cannot afford to maintain a one-sided attitude toward that market now that the smog has been cleared from the atmosphere of German industry. Much can be learned by proper analysis of the motivation of the decision of a German manufacturer of motor vehicles to establish a plant in the United States.

The other significant event is the opening of the Inter-American Highway linking the five republics of Central America. The significance of that event depends, of course, on what use is made of the highway in the development of an economic partnership in Central America. That is something in which United States business can participate most helpfully with financial and friendly profit for all concerned. The Western Hemisphere is still the best place in which United States business should put in practical application all that it has learned and can learn about world trade, meanwhile, seeking from the Department of Commerce, the Department of State, and the International Chamber of Commerce more detailed information on everything that world trade is and what is the share of the United States therein—and why.

Must Realization Be Forced?

It is becoming more and more evident that something must be done to prevent the washing out of realism by the increasing torrent of optimism in almost all aspects of American life. Something certainly must be done at least to reduce the gushing of that torrent from the mouths of all who feel that they must talk in public on everything from foreign policy to unprecedented production volume.

The "Sez he?" reactions are setting in. The "hoptimistic" talk which precedes conferences in all areas of human relations, whether political, business, or personal, is creating opposition out of nothing more than that inate trend toward antagonism which is usually voiced something like this:—"who does he think is running this thing?" And so it is that representatives of other governments get soured by what those of the United States must proclaim when they are setting out on a deliberative mission; and the confidence of the latter runs into defeat.

It is the same with business prophets. They are talking so much about how big production is going to be for no other reason than to provide jobs—and profits—and how much bigger demand is going to be because those provided with jobs—and profits—have nothing else to do with their money, that the fundamental truths that goods must be sold—and paid for—and that production can be utter wastefulness are buried beneath a mountain of guff and superimposed easy credits.

It is not good that business is getting so far beyond itself with little subsistance other than hot air. Talk is cheap, but it can cost a lot in consequences.

Washington Talks It Over

By Ralph L. Cherry
Chief, OPD Washington Bureau

Senate and house leaders have a target date of the first week of August for bringing the current session of congress to a close. It is a tentative date, however, and suggested chiefly as a goal to shoot at and not necessarily one that has to be hit.

But as matters now stand, if Mr. Eisenhower hopes to see the bulk of his legislative program enacted into law before adjournment, it will be necessary for congress to revise its present schedule of things and prod the members into a faster pace. The record shows that of some 792 measures passed by one or the other of the houses, only twenty-eight have reached the White House and been signed into law.

And the bills of general importance included in this small number can be counted on the fingers of one hand, such as the bill to continue the emergency corporate tax increase, the bill to reopen the sale of the Baytown (Tex.) synthetic rubber plant, and the measure authorizing the President to deploy military personnel for protection of Formosa. The trade agreements extension bill is well on its way to passage.

The measures which are hung up in congress, some of which might have to be dumped before adjournment, include such matters as the Organization for Trade Cooperation which involves congressional approval of GATT, amendments to the Taft-Hartley law, increase in the minimum wage, health insurance, and highway construction.

Also, there is the matter of extending the defense production act which expires in June and which will raise the question of giving the President standby authority to control prices and wages in an emergency. The latest report on the standby control authority is that the President will accept the authority if congress wants to enact it, but the administration is hesitant to propose it because it is feared that it will be tied up with the Formosa situation and create a buying scare.

CAW in Chemical Industry?

Are some of the branches of the chemicals and allied industries soon to be the target of the union movement for guaranteed annual wages? Such might very well be the case as indicated in the following clipped from the *Union News* of the CIO's new Oil, Chemical and Atomic Workers International Union:—

"The need for a guaranteed annual wage is not a pressing one for a majority of OCAW members, for a large percentage of oil and chemical operations maintain highly stable employment.

"But temporary and seasonal layoffs are a troublesome problem in a few branches of the chemical industry, particularly in manufacture of cosmetics and fertilizer.

"Some cosmetics makers boom up production to meet the Christmas and Easter rushes, then sometimes follow these rushes with layoffs. The big market for fertilizer is in early spring and after this market is met layoffs often occur.

"The sad part of it is that the products of these industries are not perishable—not nearly so perishable as an out-of-date automobile, for example — and production could be scheduled evenly to build up backlogs for the rush season.

"The workers in cosmetics and fertilizer plants—at least in some of them—could well use a guaranteed annual wage."

Protection Against Bombing

The Department of Commerce is nearing the completion of an extensive survey of industries and the products they produce that will pinpoint the effects of a bombing attack on our cities on the ability of industries to continue producing. The survey is part of the civil defense planning program.

The job has been under way for several months and for the first time brings together the essential information on industry capacity that will be needed in the event of bombing raids. The information, of course, does not cover all production but only those products of strategic or critical importance to the economy and to sustain a war effort.

For example, in the chemical field the data has been so compiled that should any particular city or area be knocked out, the government will know immediately what percentage of production of a particular line of products has been lost. Similar information would be available for other important industries.

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Heavy Chemicals

The supply position for many of the large volume heavy chemicals took on a more serene aspect last week due to the settlement of various strikes at producing plants and a return to work on a southern railroad. A wildcat strike in the midwest was settled, returning sulfuric and hydrochloric acid facilities to production. The end of the southern railroad strike permitted fuller operation of a large sulfuric acid plant. A strike in the east at the works of a producer of a number of heavy and fine chemicals was also settled.

Lithium salts showed reductions last week averaging from 5 cents to $1 per pound depending on the salt. Not all of the chemicals were affected, but reductions in the main concentrates such as carbonate and hydroxide monohydrate were expected to make themselves felt in future pricing of the other derivatives. Mercury prices continued to edge off due to selling pressure and lack of demand. Silver bullion was higher due to increased activity in the London market.

The alkali industry reported a generally strong volume of business, in keeping with the generally good tone of producing and consuming industries during this quarter. Heavy steel, rayon, paper, rubber and automotive output accounted for large volume consumption of chlorine and the alkalies. Nonferrous metals were firm almost without exception during the week. Particular strength was shown by aluminum, copper, lead, and zinc.

The American Paper and Pulp Association reported production for the week ended May 6 at 96.6 percent of theoretical capacity, as compared with the revised figure of 95.2 percent for the previous week and 93.7 percent for the corresponding week of last year.

Acid, Chromic—Contract quotations were without change. Demand held up [illegible] and good withdrawals against old contracts were reported. Stocks were ample to fill current needs. Output of chromic acid, chrome oxide green and other chromium chemicals totaled 8,113 tons in terms of sodium bichromate equivalent in February, according to the Bureau of Mines.

Acid, Hydrochloric—The supply position varied as to locale, but was generally acknowledged to be fairly long despite strong demand for several end uses, notably from the steel and steel fabricating industry. Chemical applications also required substantial quantities, and shipments in all types of containers were reported moving out in good volume.

This was hardly enough to offset heavy acid production, however, as increased output was reported from byproduct sources due to higher production rates for chlorinated hydrocarbons, as well as heavier production from Mannheim furnaces. The southwest in particular was said to have lengthy supplies of byproduct acid.

Acid, Hydrofluoric—Buying interest was good from the glass industry, and it was reported that a large amount of acid had been moving into television tube production. Consumption for use in the steel industry also held up at a high rate. Supplies were adequate to cover prompt requirements of consumers. Prices held steady and unrevised.

Acid, Nitric—Business was good in accord with the general trend in the chemical industry. Steel production and nitration of organics continued to account for large volume consumption. Prices were stable, and supplies were plentiful for current requirements.

Acid, Sulfuric—The strike at the works of a producer in the midwest having been settled, as well as a return to work on a southern railroad enabling a large plant to resume near-normal operations, were key factors in returning the supply position to regularity during the week. It was conceded, however, that supplies had never at any time during the disputes been seriously short, because consumers had been able to get what they needed by paying freight in other areas.

Consuming demand remained strong nearly all through the end use pattern. Among the main uses, with the possible exception of fertilizer manufacture, acid was reported moving in large volume for petroleum, synthetic detergent, steel and overall chemical manufacture. Steel production was estimated at another all-time record last week, as ingot and casting output totaled 2,334,000 tons, or 96.7 percent of capacity as against actual output for the previous wek of 2,331,000 tons, or 96.6 percent of capacity.

Price Trends

Advanced
Potassium stannate, 0.4c. per lb.
Silver, 2¾c. per oz.
Sodium stannate, 0.4c. per lb.
Stannic chloride, 0.4c. per lb.
Stannous chloride, anhyd., 0.6c. per lb.
hydrous, cryst., ½c. per lb.
Sulfate, 0.6c. per lb.
Tin, ¾c. per lb.

Reduced
Lithium carbonate, NF, 13c. per lb.
tech., 5c. per lb.
Hydride, $1 per lb.
Hydroxide, monohydrate, 7½c. per lb.
Mercury, $3 per flk.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 14, 1954
98.33	98.33	98.41	98.39

(For Current Prices see Page 9)

Calcium Chloride—Demand was strongly active for dust control during the week, as consumers ordered ahead to cover needs for dust-laying on secondary roads. Prices were firm and unchanged. Although supplies were said to be adequate to take care of current needs, some producers reported that they were moving all they could make.

Chlorine—Consuming inquiry showed increased strength during the week, particularly for chlorination of organics. The pesticide industry, long in the doldrums, was said to be making a strong comeback although producers noted that the start of the season had been later than usual.

Good interest was also shown for the manufacture of chlorinated solvents, and for water and sewage treatment. Production rates were said to be currently high, but it was pointed out that the current capacity of the industry was such that any feasible demand could be readily handled.

Lime—In February, 1955, domestic sales of open-market lime amounted to 664,323 tons, a slight increase over the 651,972 tons reported for January, according to the Bureau of Mines. Refractory, chemical and other industrial uses increased, whereas a slight decrease was noted in building and agricultural uses. [illegible] sold for chemical and industrial use in February amounted to 327,140 tons, and hydrated lime, 58,666 tons, as against 326,915 tons of quicklime and 58,045 tons of hydrated used in January and 267,502 tons of quicklime and 58,034 tons of hydrated consumed in February, 1954.

Open-market sales of lime for building totaled 83,905 tons in February, as compared with 84,247 tons in January and 83,262 tons in February, 1954.

Demand for high grade chemical lime was reported equal to or slightly in excess of current supply. In some areas shortages were apparent and this situation was expected to continue at least through the second quarter. Some shipments were being delayed due to lack of special types of railroad equipment.

Lithium Salts—Reductions in effect May 10 for some of the lithium salts were followed by most of the trade last week. New listings for lithium carbonate, NF, were $1.29 per pound, drums, carlots or truckloads, delivered in the United States and Canada, and $1.30 per pound, one-ton to truckload quantities, same basis.

Technical carbonate prices were 85c. per pound, drums, carlots, freight allowed or truckloads f.o.b. plant, and 90c. to $1.10 per pound, less carlots and less truckloads, same basis, as to quantity. Delivered prices for technical carbonate were $1.12½ per pound, drums, carlots or truckloads, delivered in the United States and Canada, and $1.13½ per pound, less carlots and less truckloads, same basis.

Technical chloride tonnage brackets were adjusted, with an f.o.b. plant or freight allowed price for crystals listed at $1.05 per pound, for 5,000-pound lots or more, and carlots or truckloads, delivered, quoted at $1.10½ per pound. Less carlot and less truckload prices f.o.b. plant, freight allowed, ranged from $1.10 to $1.25 per pound, depending on quantity. Ton lots to truckloads, delivered in the United States and Canada, were priced at $1.11½ per pound.

Lithium fluoride prices continued without change and were judged firm. Lithium hydride was reduced $1 per pound, listed at $14 per pound, drums, f.o.b. works. Price changes were said to be forthcoming for lithium manganite, silicate and titanate, but as yet had not been released.

Lithium hydroxide monohydrate prices were newly quoted at 90c. per pound, drums, carlots, freight allowed, or truck-

For Late Market Developments, See Page 4

loads, f.o.b. works, and 93c. to 96c. per pound, less carlots or less truckloads, depending on quantity. Delivered prices were quoted at 90½c. per pound, drums, carlots or truckloads, and 91½c. per pound, less carlots or less truckloads. Producers reported that the sluggish status of recent buying interest could have been largely responsible for the reductions.

Potash, Caustic—Movement of solid and liquid caustic potash continued unabated and at high levels despite the continuing strike on a small railroad in Niagara Falls which continued to give traffic departments trouble. Prices were firm and unchanged.

Potassium Carbonate — Sales to the glass industry for specialty use remained in good volume. Supplies were readily available at unchanged prices.

Soda Ash—Consumption by the glass industry, currently heavy due to high rates of output for nearly all types of glass, continued to figure strongly in the market for dense ash. Light ash also moved out in good quantities to the chemical industry and pulp and paper producers.

Soda, Caustic—Large volume sales for nearly all end uses continued to feature the market. Heavy withdrawals against contract by the rayon industry continued to play an important part in the market, as it has been estimated that rayon takes approximately 23½ percent of the annual output of caustic soda.

Shipments of rayon and acetate yarn and staple in April totaled 112,100,000 pounds, or ten percent less than March shipments, according to the Textile Economics Bureau. Deliveries in April consisted of 110,600,000 pounds domestically and 1,500,000 pounds for export. For the first four months of 1955 shipments totaled 441,400,000 pounds or twenty-eight percent greater than a year ago.

Tin Chemicals—Based on a 92c. per pound price for Straits tin, potassium stannate last week was quoted at 67.4c. to 74c. per pound; sodium stannate, 53.9c. to 59.3c. per pound; stannic chloride, 75.2c. to 76.2c.; stannous chloride, anhydrous, 80½c. to $1.074c.; hydrous crystals, 76c. to 77c., and sulfate, 92.4c. to 94.4c. per pound.

Nonferrous Metals

The Department of Commerce reports that imports of nonferrous metals in 1954 were worth $1,389,500,000 as compared with $1,661,300,000 in 1953 and $1,562,500,000 in 1952.

Aluminum—Primary metal prices continued without change, the industry was reported continuing to produce and sell aluminum at an all-time record rate last week. The recent decline in imports of aluminum was said to have caused domestic producers to step up production scales considerably over previous estimates. However, it was noted that thus far production and stocks had been able to keep up with demand, despite the fact that supplies were not too plentiful.

Copper—The general market was quiet, and the London exchange price managed to stay fairly close to the American price during the week, with overseas copper traded on spot at around 37¾c. to 38c., as compared with the American delivered price of 36c. per pound. No. 2 copper scrap was also quiet, reported traded at 31½c. per pound last week.

The Department of Commerce reports that exports of copper and copper-base alloys in 1954 declined to $312,100,000 as compared with $292,900,000 in 1953 and $243,900,000 in 1952.

Mercury—The market was very fluid and indefinite during the week, due to selling pressure. Sellers were unsure of buying interest, and metal was pegged nominally at $308 to $315 per flask.

Nickel—Producers and consumers alike continued to suffer from the cramped supply position of nickel. No letup was seen for the near future. Nickel cathodes were unchanged, listed at 64½c. per pound, f.o.b. refinery, including 1¼c. per pound import duty, in carlots.

Silver—Bullion was higher last week, at 89¾c. per troy ounce.

Tin—Primary markets showed little tendency toward change. Straits tin fluctuated narrowly, ending the week at 91½c. per pound, spot. Heavy demand was reported for tin plate during the second quarter, and it was expected that a large volume of tin would be taken for plating beer cans, as well as for fruit and vegetable packing.

Malaya was reported to have mined 36.45 percent of the free world's output of tin-in-concentrates in 1954, as compared with 33.15 percent in 1953. Malayan tin mines in January produced 5,151 long tons of tin-in-concentrates as against 5,266 tons in December and 5,108 tons in January, 1954.

Indonesia produced 1,834 long tons in January, as against 3,006 tons in December and 2,545 tons in January, 1954. Bolivia exported 2,695 metric tons in December as against 2,120 tons in November and 3,035 tons in December, 1953. The Texas City smelter produced 2,402 long tons of 3-star grade pig tin in January, as compared with 2,404 tons in December and 2,750 tons in January, 1954.

Domestic shipments of electrolytic tin plate, amounting to 3,680,467 tons in 1954, were ten percent higher than in 1953, the previous record year. Tin plate mill shipments in December were 269,573 tons, as compared with 261,454 tons in November. Total shipments in 1954 amounted to 1,307,096 tons of hot-dipped, as against 1,318,080 tons the previous year.

Zinc—Prime western remained unchanged, quoted at 12c. per pound, East St. Louis and 12½c. per pound, delivered New York. Demand continued to hold up well for prime western, as well as some of the higher grades. The house ways and means committee is reported to have approved a bill continuing the present law on metal scrap imports except for an amendment changing the regulations which previously had suspended the duty on zinc scrap imported under contract. The new amendment would exclude zinc scrap regardless of whether or not it is under contract.

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Oil, Gas Lease Sale Set For Continental Shelf Land

A third sale of oil and gas leases in the outer continental shelf of the Gulf of Mexico will be held at 10 a. m. (CST) July 12 in New Orleans, La., the Department of the Interior announced last week. The sale will embrace 674,095.00 acres of submerged lands off both Louisiana and Texas extending to waters as far as sixty miles from shore and 100 feet deep. The bulk of the lands advertised, 458,095.55 acres, are off Louisiana. Most of the 594,666.31 acres of land nominated by the oil and gas industry on March 25 are included in the advertised land.

For purposes of the sale, the lands offered have been divided into 210 tracts varying in size from 937 to 5,760 acres. In two previous sales, of oil and gas lands and sulfur lands, the federal government realized $142,405,000.

Sealed bids for the July 12 sale will be received by the Bureau of Land Management, Outer Continental Shelf Office, 608 Masonic Temple building, New Orleans, La., until the hour of the sale. Unless rejected for cause, the highest bonus bid will determine the right to lease.

Murphy Moves to Baltimore

Murphy Paint Corporation is moving its Newark, N. J., offices to Balimore, Md., today. The move places the complete Murphy organization under one roof. The company's new address is 2317 Annapolis avenue, Baltimore 30. The telephone number is GIlmore 5-5213.

John Stauffer Re-Elected Too

In reporting the re-election of its board of directors by Stauffer Chemical Company, San Francisco, in the May 2nd issue, OPD inadvertently omitted the name of John Stauffer from the list of re-elected board members.

Carbide Unit Vice-President

Arthur R. Lytle has been appointed vice-president in charge of research for Electro Metallurgical Company, New York, a division of Union Carbide & Carbon Corporation. Mr. Lytle has been associated with the corporation since 1923, when he joined Union Carbide & Carbon Research Laboratories at Niagara Falls, N. Y.

Texas Co. Is Building Three New Structures

Texas Company, New York, is constructing three new buildings to be completed by the spring of 1956, as the first phase of an extensive expansion of research and testing facilities, Augustus C. Long, president, has announced. The current construction program calls for two new buildings at Texaco's largest research center at Beacon, N. Y., and one new building at the company's largest refinery at Port Arthur, Tex.

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Trigg Is Given Testimonial For Savings & Loan Work

Ernest T. Trigg, chairman of the board of the Savings & Loan Foundation, was given a testimonial dinner at the Statler hotel, Washington, D. C., recently, in appreciative recognition of his accomplishment in organizing the national advertising and educational program of the foundation.

Mr. Trigg has long been identified with the paint industry. He served as president of the National Paint, Varnish and Lacquer Association from 1933 to 1947 and is now honorary chairman for life. His recently published autobiography, "Fifty-five Colorful Years," is a story of this industry's progress over the period of his career in it.

Among the speakers at the dinner were Roy W. Larsen, president, Twin City Federal Savings & Loan Association, Minneapolis, Minn., who acted as toastmaster; Walter McAllister, sr., chairman of the Home Loan Bank board; A. R. Gardner, former president of the Federal Home Loan Bank of Chicago; Walter McAllister, jr., president of the San Antonio Savings & Loan Association, San Antonio, Tex., and William K. Divers, president of the Savings & Loan Foundation, Washington, D. C. The guests included Walter J. L. Ray, president, Standard Savings & Loan Association of Detroit; Edward Baltz, president of the Perpetual Building Association, Washington, D. C., and Alfred Peterson, president of the National Savings and Loan League.

Power License Approved By FTC for Idaho Firm

Idaho Power Company, Boise, should be issued a license for the largest of its proposed three hydroelectric projects on the Snake River in Idaho and Oregon, William J. Costello, presiding examiner of the Federal Power Commission, has just ruled. He recommended denial of the company's applications for the other two dams because of a lack of market for power in this area before 1962.

The decision is subject to review by the commission. The decision of the examiner had been awaited for months and if sustained will preclude construction of a federal high dam at the Hells Canyon site of the Snake River, which is being proposed in congress by public power advocates.

The dam proposed to be authorized by Mr. Costello is the so-called Brownlee project, costing approximately $95,433,000 and designed to produce 360,400 kilowatts of power. New power facilities in the area are of interest particularly to the fertilizer and chemical industries as making possible development of the huge phosphate deposits of the area.

Copper Alloy Scrap Quotas For Germany Are Announced

A supplementary export quota of 3,000 short tons (copper content) of copper-base alloy scrap was established last week for the Federal Republic of Germany for the second quarter of 1955, the Bureau of Foreign Commerce announced. At the same time, the bureau announced that an open-end quota has been established in the second quarter for low-grade copper scrap materials containing less than 40 percent copper and no more than 5 percent nickel, such as slags, ashes, skimmings, drosses, residues, flue dust, and irony brass.

Export licensing of the supplemental quota will be limited to shipments for consumption in West Germany. This supplement will be licensed in the latter part of June for shipment after July 1.

Distribution among exporters of the additional quota will be made on the historical licensing basis already in effect, BFC said. Filing dates for submission of export license applications against the new quota will be announced shortly. When issued, export licenses will not be valid before July 1.

Lithium Corporation Opens New Sales Office in Chicago

Lithium Corporation of America, Inc., Minneapolis, Minn., has opened a Chicago sales office at 121 West Wacker drive. C. M. Williams will be in charge of the office, which will handle the company's business in Illinois, Indiana, Wisconsin, Kentucky, Tennessee, Missouri, Kansas, Oklahoma and Michigan.

Mr. Williams recently joined Lithium Corporation after seven years in sales and technical service work with the industrial chemicals division of American Cyanamid Company.

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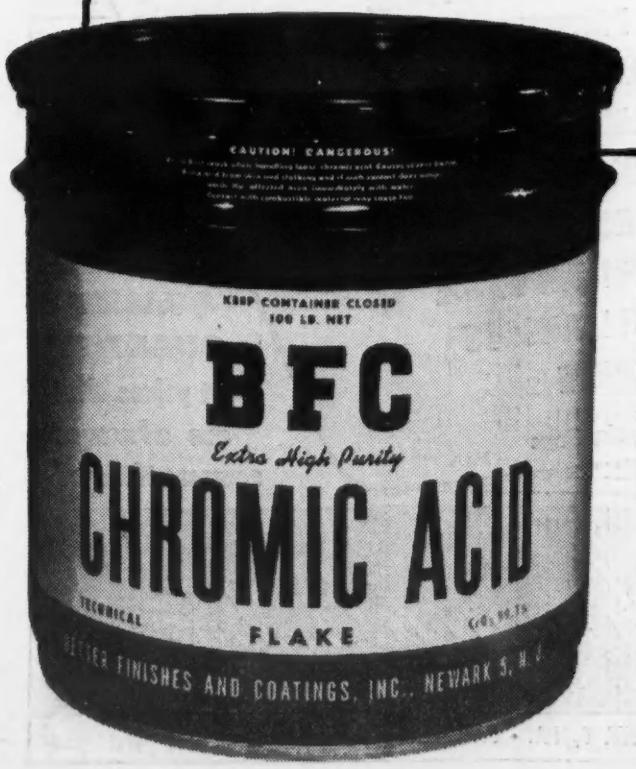

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Flaxseed Buying by USDA To Be 10,000,000 Bushels

The Department of Agriculture expects to acquire about 10,000,000 bushels of flaxseed when 1954-crop loan and purchase agreement stocks are taken over under the price support program. The take-over period for 1954 crop price support stocks began May 1.

The amount compares with about 17,000,000 bushels from the 1954 crop. The seed will be offered in part for sale for export and in part for domestic toll crushing as it is acquired. All offers will be made on a competitive bid basis and the volume crushed or sold for export will depend largely upon market developments as reflected by the bids received.

Announcement of offers will be made by the Minneapolis CSS Commodity Office as stock of flaxseed are available for delivery. Officials explained that effort is being made to obtain an early movement of 1954-crop flaxseed from farms and country warehouses to terminal storage points. This is expected to facilitate disposition of the seed, prior to the heavy seasonal movement of 1955 crops to market and ahead of receipts of 1955-crop flaxseed next fall.

Potassium Lands Rules Revised by Interior Dep't

Regulations of the Department of the Interior governing issuance of permits and leases of public potassium lands were revised last week to encourage marginal potash production in fringe areas adjoining base leaseholds.

Under the new regulations, operators will have their choice of two options in making payment for the right to mine fringe areas. They can make a cash bonus payment of $15 per acre for the right to mine fringe areas, or pay a royalty on fringe area production equivalent to the amount of the royalty specified in the base lease, plus an additional 1c. per ton of ore mined.

Another change will permit dating of preference right leases on the first of the month following approval of leased applications. Heretofore, leases have been dated back to the time of application, with a resultant piling up of back fees. A third modification provides for positive notification of lessees in advance of lease adjustments rather than "whenever feasible," as formally provided. The revised regulations go into effect June 5.

Loss Leader Controls

—*Continued from page 3*

retailers in the state were to make even a half-hearted attempt to avoid violations. And the adjudication of a complaint of a violation would become so interminably involved that competitive retailers complaining of loss leader tactics by price-juggling retail monopolists could be completely bankrupted long before any government agency charged with responsibility for adjudication could bring in, out of the confusion, any verdict, right or wrong.

"Tragically Unworkable"

"By any realistic approach, Mr. Barnes and his committee can determine quite readily that the idea of substituting, for fair trade laws, laws against loss leader selling would be tragically unworkable. It is doubted that we need a new law practically impossible to live by and therefore providing principally an opportunity for selective prosecutions, which could be persecutions. Under fair trade the individual manufacturer sets competitively and publicizes the retail price of his individual trade-marked product and there can be no confusion.

"Anti-loss leader laws would serve only those same big-store, big-money marketing interests that have been trying for years to destroy fair trade. They hate fair trade because it offers the only serious obstacle to their use of honored trademarked products at lurist prices. The ballyhooed cut price of the berserk violator of fair trade laws is not prompted by love of the customer, as often claimed. Its sole purpose is to lure unfairly away from the fair-trading retailer those who, in recognition of the advantages offered by him, have become his regular customer," Mr. Anderson stated.

Trade Briefs

Bemis Bro. Bag Company, St. Louis, Mo., has named R. J. McDonald sales manager for the company's packaging service department in Minneapolis, Minn.

Metalsalts Corporation, Hawthorne, N. J., has announced the appointment of Raymond J. Fallon as sales representative for the New England, New Jersey, and metropolitan New York area.

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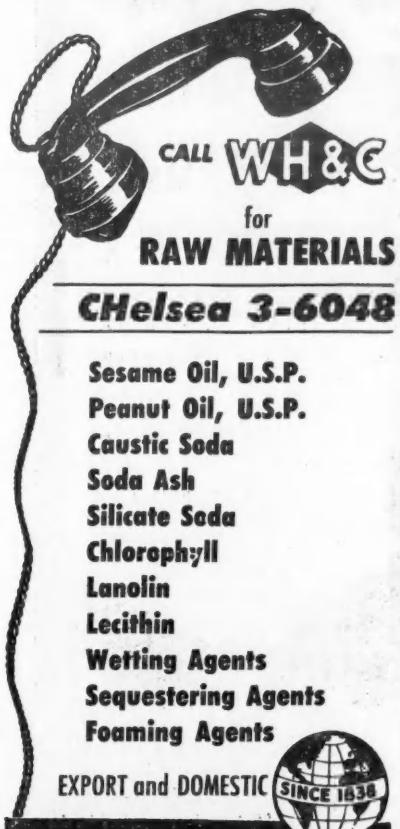

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Metal Powder Association Elects Boorky President

Members of the Metal Powder Association, meeting at their eleventh annual meeting in Philadelphia recently elected Morris Boorky president of the association. Mr. Boorky is president of Presmet Corporation, Worcester, Mass., and also chairman of the fabricators division of the association. B. T. duPont, sales manager, plastic metals, division of National-U. S. Radiator Corporation, Johnstown, Pa., was elected chairman of the board.

R. D. Ponemon, general mnager, Pyroferric Company, New York, was elected chairman of the iron powder electronic core division and vice-president of the association. E. H. Klein, manager, metal division, New Jersey Zinc Sales Company, New York, was elected vice-president and chairman of the powder producers division. D. L. Almquist, Stackpole Carbon Company, St. Marys, Pa., was reelected chairman of the ferrite division and vice-president. W. A. Irvine, manager, production engineering, Maytag Company, Newton, Ia.; L W. Davis, president, Metal Hydrides, Inc., Beverly, Mass., and H. E. Hall, president, Metals Disintegrating Company, Elizabeth, N. J., were elected to the board. The balance of the board consists of Harrison Stackpole, Stackpole Carbon Co., and Carl Johnson, of Presmet.

Spencer Kellogg Names Mgr. Of Edible Products Research

Spencer Kellogg & Sons, Inc., Buffalo, N. Y., has named Edward Handschumaker to the newly created position of manager of edible products research. Mr. Handschumaker will work with Spencer Kellogg's vegetable shortenings, salad oils and soybean flour in an expanded program for the development of new food products.

In his professional career, Mr. Handschumaker has done considerable research in the laboratories of United Drug Company and of Lever Brothers. He will be assigned to Spencer Kellogg's Edgewater, N. J., plant until the new research laboratory now under construction near the Buffalo airport in Cheektowaga, N. Y., is completed.

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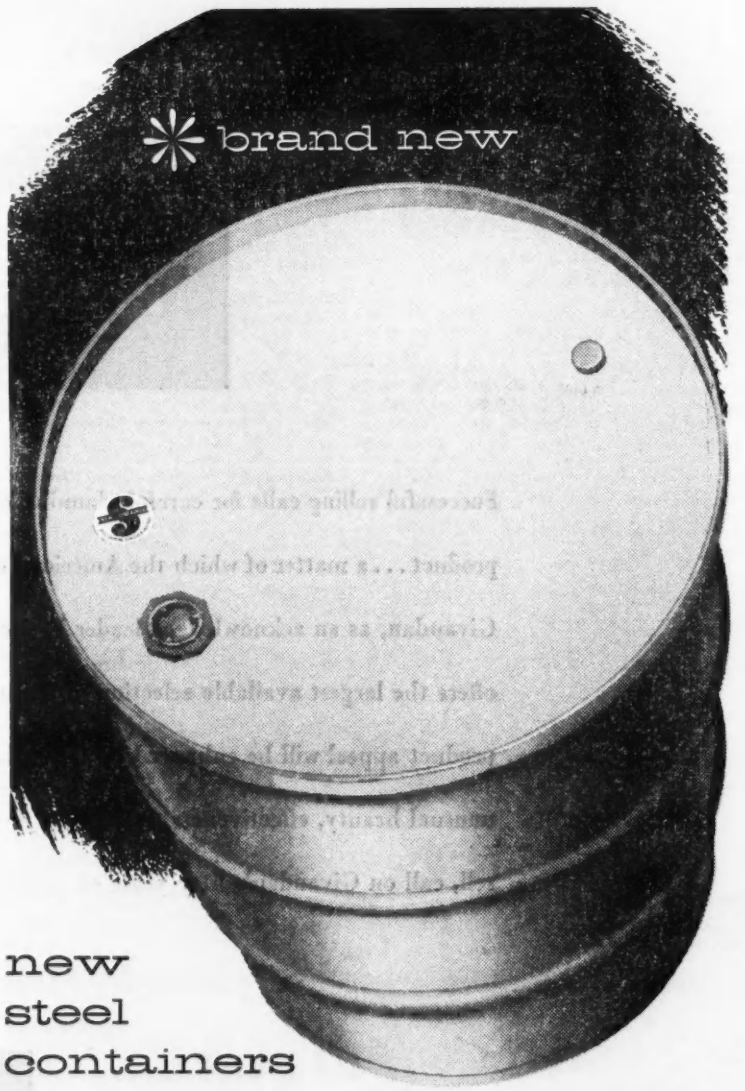

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The Toilet Goods Association

20th Annual Convention, New York, May 10-12

John A. Ewald, president of Avon Products, Inc., New York, was re-elected president of the Toilet Goods Association at its twentieth annual convention, held May 10 to 12 at the Waldorf-Astoria hotel, New York.

The association's four vice-presidents were also re-elected. They are Jean Despres of Coty, Inc., New York; Pierre Harang of Houbigant Sales Corporation, New York; A. E. Johnston of the Colgate-Palmolive Company, Jersey City, N. J.,

John A. Ewald
Re-Elected President of TGA

and Charles T. Lipscomb, jr., of the J. B. Williams Company, Glastonbury, Conn.

Philip C. Smith of Yardley of London, Inc., New York, was re-elected treasurer of TGA, while William F. Denney, jr., of Frances Denney, New York, was again named secretary of the association.

Re-elected to a three-year term on the board of directors were Robert B. Brown of Bristol-Myers Company, New York, and C. W. Godefroy of the Godefroy Manufacturing Company, St. Louis, Mo. Newly-elected directors for three-year terms were:—

R. E. Ewalt of Noreen, Inc., Denver, Col., J. George Fiedler of Kelton Cosmetics, Inc., New York; William Mennen, jr., of the Mennen Company, Morristown, N. J., and Richard Salomon of Charles of the Ritz, Inc., New York.

Re-elected to the board for one-year terms were the following representatives of TGA's associate member:—Dr. Victor G. Fourman of Syntomatic Corporation, New York and Paul E. Roehrich of the Richford Corporation, New York.

Tripling of Toilet Goods Sales Cited

In his presidential address, Mr. Ewald pointed to the fine record made by the toilet goods industry. "In 1934," he noted, "our volume was $324,400,000. In 1954, it was $1,086,800,000. We have tripled our sales in twenty years."

The industry's progress during the past two decades, he felt, "can be attributed greatly to our keeping pace in a market of ever-changing character." He pointed out that placement of "the right product in the hands of the consuming public at the right time" requires keen insight, analsyis and vision. "The results," he declared, "attest to such thinking."

"Just as in any other industry," Mr. Ewald went on, "we have had to overcome difficulties and solve problems as they arose. And through the combined efforts of our members and our association, we have resolved them successfully. Our success could not have been achieved without the cooperation of members and the aid and assistance of the association."

Mr. Ewald paid tribute to Stephen L. Mayham, executive vice-president of the association, as "a man fully qualified, experienced and dedicated to keeping us on the right track." He went on to cite TGA's many and varied activities, which include "answering day-to-day inquiries from members, as well as keeping the membership posted on developments regarding such major matters as the current fair trade situation and the bills before the Food and Drug Administration." He also thanked Mr. Brown of Bristol-Myers, chairman of the program committee for the convention.

Utilitarian Aspects of Toiletries

Stress by cosmetics and toiletries manufacturers on the utilitarian aspects of their products, rather than on the glamor aspects exclusively, pays off at the sales counter, Dan Rennick, editor of *American Druggist*, contended. He made this assertion in presenting data which proved that during the past quarter-century "the products which showed the greatest improvement in sales were those offering genuinely utilitarian advantages to consumers."

Mr. Rennick estimated that, twenty-five years from today, cosmetic manufacturers can expect a 78 percent increase in sales of their products—simply on the basis of an anticipated climb in disposable income. But, he declared, "a sales gain much greater than 78 percent can be achieved by those manufacturers who incorporate in their products more of the utilitarian factors that consumers want—factors that offer greater efficiency, greater safety and greater convenience."

From a study of the patterns of the toiletries industry during the past twenty-five years, Mr. Rennick stated, two "gigantic facts" emerge.

"(1) There has been a pronounced trend to add highly practical, highly desirable functional elements—even to those products which are essentially glamor items.

"And (2) where a genuinely useful product has come along, sales have shown exceptional gains.

Parallels Pre-Packaged Foods

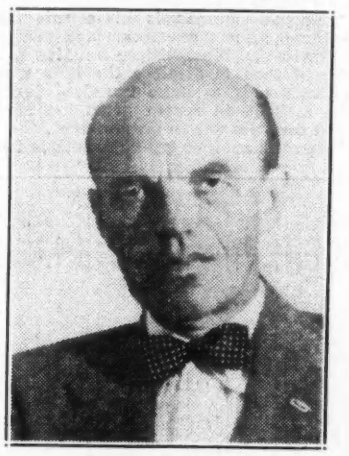
"These trends in your industry parallel —almost literally—the development of pre-packaged foods in the food industry.

"Food men tell me that the day is not too distant when all foods will come pre-packaged—if not actually pre-cooked.

"The American people, it seems, want greater leisure—more time to themselves. To achieve such leisure, they will accept virtually all product ideas which unmistakeably save time . . . save effort . . . save wear and tear.

"In view of the public's demand for greater leisure, there is no question that, in the years to come, you will incorporate in your products even more utilitarian factors—many, many times more—than you have adopted up to now."

In fact, the speaker continued, there are



Stephen L. Mayham
Executive Vice-President

already indications of the kind of products that may be expected to appear on the market in the years ahead. These new developments, he felt, can be classified in four categories—greater efficiency, greater safety, greater convenience and greater speed in using. Products offering greater efficiency, he indicated, appear to be developing along the following lines:—

"First—there will be items with multiple functions. The same products will

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do all the jobs heretofore done by two or more products.

"Several items of this type have appeared in recent years and have proved quite successful.

"Three examples come to mind:—

"(1) Cake makeup—which acts as both face powder and powder base.

"(2) Deodorant cologne—which deodorizes at the same time that it refreshes you.

"And (3) shampoos—which both clean your hair and condition it. This type of shampoo makes the hair more manageable by not de-oiling it completely.

Multiple Function Product

"Very, very close to actuality," he reported, "is a multiple function product that has been in development for some time. Here, the product is ejected from its container as a fine fog. But by the time it hits your hand or your foot, it turns into a smooth, soothing powder.

"Can you picture this sort of thing as a combined after shave lotion and powder?

"Obviously, the multiple function product will tend to displace the item which possesses only a single function—just as cake makeup in recent years has superseded face powder to some extent.

"There is another type of multiple function which is so important—which is bound up with so much that is of special significance—that I want to set it apart.

"This is the cosmetic or toiletry which, in addition to its usual function, also makes a contribution to the consumer's health.

"Examples happen to be fairly conspicuous at this time.

"They include dentifrices which not only keep your teeth clean but also prevent decay . . . and face creams which not only soften the skin but also protect it with a germ killing antiseptic . . . and still other skin creams which impact vitamins or hormones.

"Almost every cosmetic manufacturer I've consulted, in preparation for this talk, is convinced that we're in for an accelerated trend toward what one man calls 'cosmepeutic products.'

"Other aspects of this trend, in addition to that concerning multiple function items, are these:—

"One is the development of combinations of two or more products to be used in conjunction with one another. It is conceivable that a box of vitamins—plus minerals like certain of the fluorides—would be packed together with a tube of toothpaste. The former would be taken internally and would help to prevent tooth decay, while the latter would serve to keep the teeth clean.

Teen-Agers and Infants

"Another development in the direction of cosmepeutics—already under way in a dozen laboratories—arises from the fact that the number of old people is increasing at a faster rate than is the total population.

"It is estimated that, in twenty-five years, there will be 24,000,000 people sixty-five and over, compared with 13,800,000 today. This vast increase in the number of oldsters will create a substantial demand for products that will enable the old folks to hold on to youth a while longer.

"Despite doleful predictions that treatment lines are on the way down, I think that the need for geriatric cosmetics will stimulate a resurgence in treatment lines.

"The treatment items, however, will have to incorporate therapeutic qualities.

"But the greatest development in items for old folks," Mr. Rennick predicted, "will probably be in the hair products field.

"Most oldsters believe that . . . changing the hair in some way . . . makes them look younger. That calls for hair dyes, of course. But it also opens up a market for shampoos or dressings or home permanents which, by the addition of fluorescent dyes or the equivalent, could give new life, new lustre to gray hair."

Jean Despres

Re-Elected Vice-President

Turning to two groups at the other end of the population structure—teen-agers and infants, the speaker felt that there will be a number of special product formulations aimed at these markets in the next few years.

"As in the case of the people in the sixty-five-and-over category," he pointed out, "the number in these two groups is expected to rise at a rate far greater than that which will prevail in any of the other age categories.

"It is conceivable that, just as there has been a trend toward special cosmetics for teen-age girls, there will probably be a parallel development of toiletries specifically designed for teen-age boys.

"With their fathers regularly using hair dressings and deodorants, most youngsters will now grow up completely unaware that such items were once considered sissified.

"The recent advent on the market of a baby shampoo, composed of ingredients that do not sting the eyes, suggests another possible trend for the future—a complete line of baby toiletries.

"In addition to the usual baby oil and baby powder—there's no reason why doting mothers would not want to use a hair dressing to keep unruly hair in place.

Special Deodorant for Babies

"There is even need for a special deodorant designed to offset the odors of babyhood.

"Mention of fluorescent dyes a few minutes back reminds me that a host of new ingredients can be anticipated—ingredients which will certainly improve the efficiency of a product.

"Ingredients that have already entered the market show what to expect. Such ingredients include:—New anti-allergy materials; long-lasting stains for lipsticks; new sun-screening agents; silicones—that protect the skin against dryness, eczema, and infection; acetylated monoglycerides—that restore natural oils to the skin; acetylated lanolins and acetylated cholesterols—that help to soften the skin, and detergents in bar form—that could be used in all types of water . . . that would leave no bathtub rings . . . and that would be good for people who are allergic to soap."

As for products of the future that will offer greater safety to the consumer, Mr. Rennick saw them as stemming largely from new types of materials—chiefly synthetics.

Eliminating Skin Disorders

"There is great need, for example, for materials that—with complete safety—will prevent allergies or even eliminate skin disorders," he pointed out. "Even such things as shampoo will be made with ingredients that would be fairly digestible if swallowed by accident."

The speaker was of the opinion that the biggest development in the products of the future will in all likelihood be along the lines of greater convenience. The most successful products of recent years, he contended, "are the result mainly of new types of packaging which made it easier for consumers to apply the product or to carry the product around with him."

"Examples," he said, "are the plastic squeeze bottles for deodorants . . . the aerosol containers for hair lacquers . . . and the purse-size flacons for perfume.

"Almost every manufacturer I've talked to is therefore firmly convinced that—during the next decade or so—advances in cosmetic packaging will actually outstrip advances in the products themselves.

"For the immediate future, most of the activity is expected in the field of pres-

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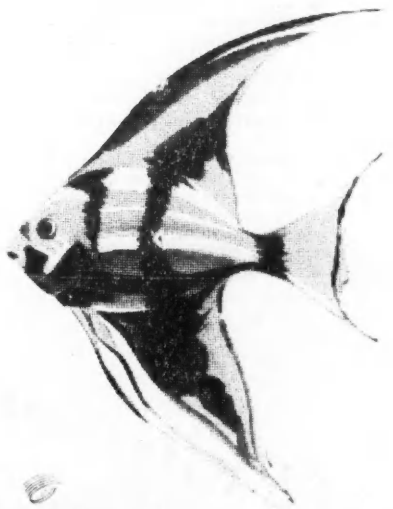

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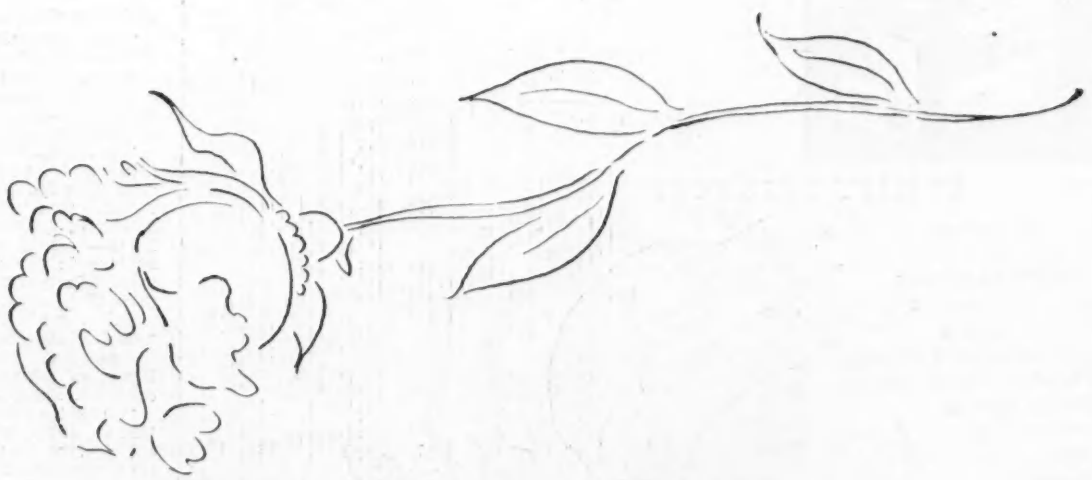

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sure packs—particularly with respect to the improvement in valves and the use of glass containers.

"Work on valves is proceeding with such rapidity that, almost any day, we can hope to see a valve that will satisfactorily dispense powder—said to be among the most difficult of materials to dispense via aerosols.

"Already an actuality is the metered valve which dispenses a fixed quantity of toothpaste on a brush—or a pre-determined quantity of shampoo on the hair.

Glass Aerosol Container

"Also an actuality is the aerosol bottle or jar made of glass. Several toiletry manufacturers tell me that the average woman would much prefer to see a glass container in her boudoir than a tin can.

"Effective utilization of glass for aerosol purposes is dependent on two things:—

"(1) The development of low pressure aerosols—strong enough to eject a product via a fine spray, yet not so explosive as to lead to breakage of the glass container.

"And (2) the development either of a new type of non-breakable glass . . . or of a type of glass that will not fly in all directions in the event of unexpected breakage.

"The non-flying glass, coated with a plastic, is already available.

"But aerosol packages aren't the only ones in the works.

Development of Portable Packages

"A considerable amount of energy is now going into the development of portable packages—the kind that women will be able to carry in their purses and be able to use without fuss or mess.

"Much of this effort is being devoted to single-use packages made largely of laminated foil. Just tear away a corner . . . and apply.

"You can now get single-use packages for almost anything—for hand lotion . . . for face cream . . . and for a scented, wet, paper washcloth which quickly becomes a dry cloth once it is exposed to the air.

"Then there is the complete cosmetic kit. This includes all kinds of mechanical dispensers in miniature, packed in a kit small enough to be carried in the average purse.

"Object here seems to be the creation of a carrier, not unlike a compact, which will enable a woman to use almost any type of cosmetic she may want to use—even when she's away from home.

"In this connection, one manufacturer mentions that he's been thinking of putting together a variety of single-use packages—each for a different purpose—in a carrier resembling a small, spiral-bound note book."

Statistics indicate, Mr. Rennick continued, that the toilet goods which showed the greatest improvement in sales from 1930 to 1954 were those offering utilitarian advantages to consumers. In his compilation, he said, he was excluding home permanents because the product was not on the market in 1930.

Shampoo Rated Top Item

Top item during the past twenty-five years, he said, is shampoo, with a dollar sales increase of 1026 percent. Next, he went on, is deodorant, with a 732 percent rise. Third is lipstick, up 361 percent.

Items showing the poorest sales records during the past two and a half decades, he said, were those offering little or no utilitarian benefit to consumers. Rouge, he said, declined 59 percent in dollar sales from 1930 to 1954. Perfume showed a drop of 57 percent, while face powder was off 48 percent.

"You can quickly realize how poor is the performance represented by these figures," he said, "when I tell you that—by comparison—disposable income rose 200 percent during the same period of time.

"Sales in your industry—sales as a whole—tend to follow disposable income to a very marked degree.

"That fact has been made the basis for a formula devised by the experts in the Department of Commerce.

"Over the long pull, according to this formula, whenever disposable income goes up 10 percent, consumer expenditures for toilet preparations go up 8 percent. Conversely, whenever disposable income drops 20 percent, expenditures for toiletries also drop—by 8 percent.

Application of Commerce Formula

"I've tried out this formula on the available data of the last twenty-five years . . . and I find that it works with surprising consistency.

"I should like, therefore, to apply this formula to the future. With your kind indulgence, I should like to advance a forecast as to what sales of cosmetics and toilet goods will amount to in this country—twenty-five years from today.

"As the basis for the forecast, we must first establish several other factors—particularly with respect to population growth and the rise in disposable income.

"The experts are fairly well agreed that, by 1980, population in this country will have grown by 47 percent.

"They are also fairly well agreed that, by 1980, disposable income will likewise have shown an increase. According to the most conservative estimates, this increase will come to 35 percent per capita—in terms of today's price level. The influence of price canot possibly be predicted.

"By combining these two estimates—the 47 percent increase in population and the 35 percent in disposable income per capita—we find that disposable income for the entire country should jump, in 1980, by at least 98 percent.

"We now apply our formula. Let's repeat it: For every 10 percent rise in disposable income, there is an 8 percent rise in toiletry volume.

Toiletries Growth Forecast

"With disposable income scheduled to go up at least 98 percent in the next quarter-century, the application of our formula shows us that sales of toiletries and cosmetics will improve by at least 78 percent over the same period of time.

"But," Mr. Rennick concluded, "if you incorporate in your products more of the utilitarian factors that consumers want—if you make products that offer greater efficiency, greater safety, greater convenience—then, I am convinced, you can achieve in the next twenty-five years a sales gain that will be much, much more than 78 percent."

Toilet goods manufacturers are being "pounded back and forth" by at least four, fast-moving marketing trends, Marvin Bower of McKinsey & Co., New York, declared. These trends, he said, are:—

"(1) Self-service; (2) decline in the position of downtown department stores and variety stores as channels of distribution; (3) movement of toilet goods through new channels, such as food markets, discount houses, and door-to-door; and (4) the movement of people to the suburbs, bringing mail order department stores, department store branches, shopping centers, and other new types of outlets.

"Some toilet goods manufacturers find themselves pounded one way by one of these trends and another way by another. And, of course, each trend has a sharply different impact on the individual manufacturer—for example, food store distribution is meat for one manufacturer and poison for another."

No Overall Solution to Problems

Because of the wide differences between these trends and their varying impact on the individual manufacturer, Mr. Bower felt a single set of solutions for

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all toilet goods makers "is futile and even dangerous." The answer, he said, must be tailor-made for each company—adapted to its product, consumer franchise, present reputation, present distribution channels and management philosophy.

However, he contended that a common approach can be developed in the solving of these problems—"concrete and specific ways for solving the critical marketing problems that most toilet goods manufacturers face." He made the following suggestions in connection with the point of view that should be taken in such an approach:—

Prompt Attack Suggested

"1. Don't put off the attack on the problem: Problems don't solve themselves. The unsolved problem usually festers.

"2. Base your solutions on facts: The day of successful marketing by hunch has largely passed. Occasionally some genius will make a successful plunge based solely on hunch. But smart marketers don't count on being geniuses—they get the facts.

"3. Don't insist on finding a single answer: There is really no 'national' market. The United States is a complex of local markets, each with its own peculiarities for your particular product. Even if your product has national distribution, approach the solution of your current marketing problems on a market-by-market basis. If there ever was a day for 'national' marketing policies, I believe it has passed for most consumer products.

"4. Try out your solutions on a market-by-market basis: Capitalize on the fact that the national market is a complex of individual local markets. Don't plunge on a national basis. It is not necessary—in fact, it is usually dangerous.

"5. Put solutions into effect wholeheartedly: Once a solution you believe in has been developed, put your full efforts behind it and carry out the program effectively. One large food chain management states that when most toilet goods manufacturers do finally decide to distribute through food chains, they make the move reluctantly and poorly. One toilet goods manufacturer stands out in that chain's eyes by coming to them with a program of packaging, display, and promotion designed specifically for their needs."

Tools Needed in Solution

If the toilet goods maker is to solve these problems in a fact-founded manner, Mr. Bower pointed out that he must have the following tools:—

"1. Marketing research: Effective marketing research is an essential ingredient for developing sound solutions; and, of course, many toilet goods manufacturers have well-established market research units. If you do not, don't depend on your advertising agency. Set up your own group even though it may have to be small, and then develop its effectiveness.

Advertising Research

"2. Advertising research: The importance of advertising in the movement of toilet goods makes it essential that the strategic job of advertising be clearly defined and carefully geared to other elements of the marketing program. Obviously the advertising should be effective. A few of the smartest toilet goods manufacturers have a well-organized advertising research activity in addition to marketing research. They don't expect their advertising agencies to do the full job, nor do they want the agency to check its own effectiveness.

"3. Distribution research: Violent changes in the distribution of toilet goods indicate the advisability of establishing a distribution research activity in some companies. The magnitude of the distribution research job is emphasized by the advisability of tailoring distribution to conditions in individual markets. The group need not be a large one—perhaps even one individual who will concentrate his attention on finding and analyzing facts concerning channels of distribution.

"4. Marketing planning unit: The need for sound and strategic marketing plans in the toilet goods field makes it advisable to establish a special organizational unit charged solely with that responsibility. The growth of the position of 'product manager' in toilet goods companies has been one response to the need for specialized attention to strategic marketing planning."

Mr. Bower went on to list the following five basic guides necessary in the development of toilet goods marketing solutions:—

"1. Solve your own problems in your own way: The leader in any field is seldom a copier. He builds his products to meet consumer needs; and he builds a marketing program designed to fit his management philosophy and to capitalize on his own strengths.

Developing a Unique Product

"2. Develop uniqueness of product: The toilet goods manufacturer needs to develop specific and concrete answers to this basic question: why should the consumer buy my product rather than those of competitors? Without concrete answers to this question, advertising claims must be based on fluff. But with concrete answers, the possibilities for building a consumer franchise are greatly enhanced. And with a real consumer franchise, churnings in the channels of distribution will be less serious.

"If your product (including the package) will do nothing for the consumer any better than any other product, the impact of current trends will be more severe. In these circumstances, you had better put your research and development people to work. The value of product performance in the toilet goods field is illustrated by the inroads made by lipsticks manufacturers that have developed products with unique characteristics.

"3. Develop dealer advantages: The successful toilet goods manufacturer must be able to answer the dealer's question: why should I handle your product rather than those of your competitors? The dealer's problem of inventorying and displaying a multiplicity of brands makes it imperative that the successful toilet goods manufacturer have concrete and specific answers to this question. And the answers will be different for different types of outlets. The manufacturer must think through the program for each channel of distribution: packaging, displays, turnover, and other elements in the program that add up to profit for the dealer.

Building a Consumer Franchise

"4. Build a consumer franchise: A consumer franchise built on effective advertising is obviously an essential ingredient for most toilet goods manufacturers. The most effective advertising appeals will, of course, be built on product performance demonstrable to the consumer. The advertising agency can be held accountable for doing a good job only if the manufacturer develops real appeals with which to work.

"5. Develop effective marketing administration: In the toilet goods field—as in most fields—outstanding success is usually built on doing simple things well and consistently. Under current chaotic marketing conditions, the toilet goods manufacturer should provide for organizational separation of planning and field selling activities."

In closing, Mr. Bower conceded that his suggestions might be considered "so fundamental as to be obvious." However, he contended that the success of marketing programs is usually founded on (a) the development of individual programs based solidly on the idea of satisfying consumer needs and wants and (b) "doing simple and rather obvious things well and consistently"—and just a little better than one's competitors.

Changing American Market

Reporting on the changing American market, Ruth Fowler, department store merchandising manager of *Life* magazine, called attention to a series of newspaper advertisement run by her magazine in 1948. Called "Decade of Opportunity 1950-1960," they contained a variety of data furnished by the Twentieth Century Fund.

It was pointed out, for example, that a growth of 15 percent in income would take place before 1960. Right now, only five years along in the decade, she noted, we have almost reached the income goal already. Many people, along with *Life*, were too conservative on the growth of the American economy. Certainly this applies to the toilet goods field, she said, especially when one considers that more than $1,000,000,000 was spent for toilet preparations last year. And this figure,

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A. E. Johnston

Re-Elected Vice-President

she added, is for perfume, cosmetics and toilet preparations only, and does not include toilet soap.

"Besides having a mass luxury market on our hands," Miss Fowler continued, "there have been a number of other things going on in this changing America that are significant to us. Take the pattern of distribution of toilet goods, for instance. Here we see that food stores have made really rapid strides, up from just 6 percent of total sales in 1950 to 17.1 percent last year.

No Aspersion on Other Retailers

"We don't mean to imply that other types of retailers have not progressed. They have. Department stores, drug stores, variety chains and other retailers are still very strong. But all of us recognize the amazing vitality of the supermarkets. The reasons for the super markets' popularity—and the newer type of drug and department store outlet—were implied in the film you saw today.

"They are often located in shopping centers serving the booming suburban areas, which are growing at a fantastic rate. Many of the people in these areas are part of the growing middle income group—the people with bigger families and many more varied activities — to whom one-stop shopping is almost a necessity on many occasions. This growing middle income group is the market now, and promises to be even more important in the future.

"Another reason for the success of convenience shopping outlets such as the supermarket," Miss Fowler asserted, "is the growth of the female working force. Twenty million women are now at work, and they naturally need to find your products quickly and easily. All retailers are feeling in some degree the effect of this growing force in this changing America."

Industry's Job Termed Excellent

The toilet goods industry was cited by the speaker for the excellent job it has done in keeping pace with the rapidly changing American market. "For instance," she pointed out, "your advertising expenditures in all national media has risen from $69,000,000 spent in 1945 to over $101,000,000 last year." And, she added, a recent study shows that retailers are well aware of the job being done by toilet goods manufacturers.

With a bigger middle income group inevitable and along with it, more money to spend and bigger families besides, Miss Fowler maintained that the toilet goods sales picture "should necessarily be optimistic."

Speaking on "The Larger Responsibility of Advertising," Charles L. Whittier, retired vice-president and chairman of the plans board of Young & Rubicam, New York, made the point that the advertising and cosmetic businesses must get together because each is part of the other.

Mr. Whittier stated that he had prepared his talk after studying the cosmetic ads from a year's issue of a leading women's magazine and that he had come to two obvious, basic conclusions, namely, that the cosmetic industry's market is made up of women, and secondly, that the purpose of the industry is to make women beautiful. Since it is important for the cosmetic industry to understand women, Mr. Whittier said he would comment on some of the industry's misconceptions, as he had noted them in its nationwide advertising.

Women Seen Intelligent Market

Some members of the cosmetic industry were under the impression that women are not bright, he stated. He based this conclusion on the large amount of advertising he had noted that missed its mark, or that made a too-obvious point. Women are realistic and practical, Mr. Whittier pointed out, and for this reason, advertisers seeking to influence them should keep in mind that they are approaching an intelligent market.

The industry's second mistake in its approach to feminine-directed advertising is that it lacks ingenuity, Mr. Whittier continued. He based this, he said, on the observation that many cosmetic ads use a similar approach. Both the messages and the illustrations are often identical, or so similar as to be almost indistiguishable from one another. For this reason, in many campaigns no one brand stands out, and the messages are diluted, the speaker declared.

To illustrate his point, Mr. Whittier quoted a series of statements and slogans taken from unspecified lipstick ads, and pointed out that not one statement suggested a particular brand, and that all blended together to suggest simply the general idea of lipstick.

Ads With Originality Detailed

As example of the type of advertising approaches that offer a novel, unstereotyped approach, Mr. Whittier described five advertisements that he said he would make use of if he were a manufacturer of lipsticks, hand creams, or other toilet articles.

Moving on to the motivation behind women's cosmetic purchases, Mr. Whittier cited the fact that all women seek romance, or to put it another way, are looking for a husband. The cosmetic makers are aware of this fact, he admitted, but, he went on, they overlook the equally important fact that women, once married, aim at holding their husbands. By this oversight in their approach, cosmetic advertisers miss a very large potential market, according to Mr. Whittier.

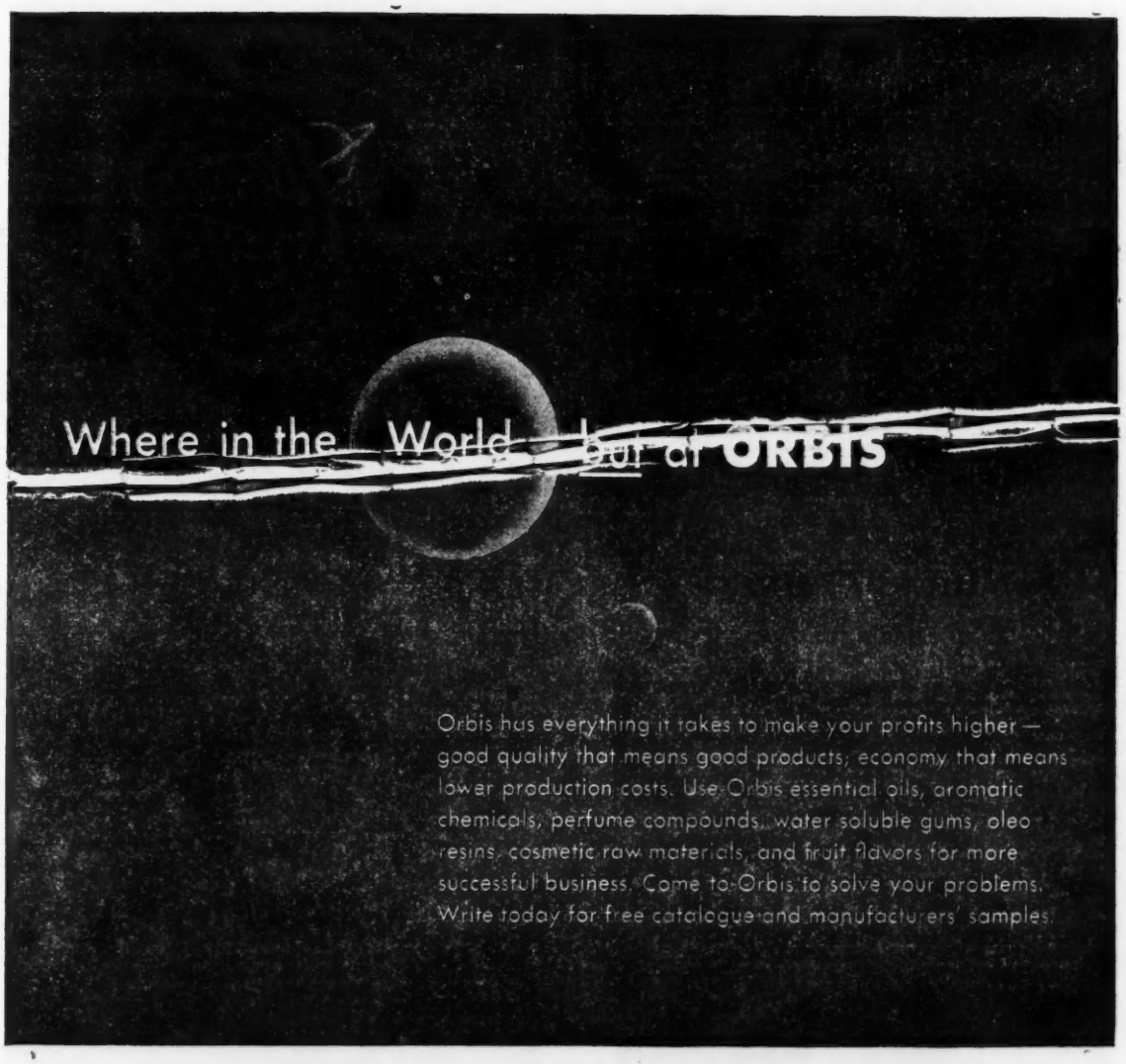
What Motivates Cosmetic Purchases

Listing other prime motivations leading to women's cosmetic purchases, the speaker noted the facts that women want other women's admiration, and that women want their children to find them attractive. Emphasizing these two desires could also bring fresh approaches in cosmetic advertising campaigns and could offer relief from the monotony of the emphasis on romance, he felt.

Cosmetic advertisers also tend to ignore older women, according to Mr. Whittier. He pointed out that very few ads are addressed to the forty-five to sixty-five year age group. Nevertheless, this market is growing bigger and bigger every year, he noted. Mr. Whittier also stressed the fact that this age group is a wealthy one and is becoming wealthier all the time. In order to reach this large group of potential buyers, he advised the industry to remember that the type of cosmetics appropriate for a woman of thirty are inappropriate for a woman of sixty. It was his contention that women in this group would respond to advertising campaigns directed to their particular beauty problems and aims.

The third and final error in the cosmetic industry's approach to its market, Mr. Whittier stated, is its lack of faith in advertising's ability to build a consumer franchise. Cosmetic makers demonstrate this fact by their reluctance to blanket the market with their messages and thus gain brand recognition. He cited the infrequent insertion of ads as a basic mistake, since the potential customer fails to remember the advertising message when there is a long period elapsing between ads. If the industry were to spend more money on advertising, Mr. Whittier asserted, its message would hit its mark and achieve a proportionately higher rate of sales.

In his summary, Mr. Whittier listed the



essential ingredients of successful cosmetic advertising as extensive research on the product, an imaginative approach in its advertisements and frequent insertions and repetitions of the ads themselves.

"Do You Really Know What Your Customer Wants?," a plea for more understanding of consumer behavior as the key to new opportunities in sales, was presented by Pierre Martineau, director of research for the Chicago *Tribune*. Mr. Martineau emphasized the need to understand the total American market, and not just a segment of it. He stated that the biggest fact to remember in obtaining this total approach is that the middle income group is expanding at a phenomenal, and unheard of, rate.

Attitude of Middle Income Group

The attitude of the tremendous middle income group, Mr. Martineau declared, can be summed up in one word: "more". He stated that people have, and want, "more" of all the good things obtainable. In addition, they have the money to translate these wishes into action.

Since it has more money, however, the middle income group requires more education to direct its spending, Mr. Martineau said. Cosmetic makers are missing their full potential market if they neglect the need to educate people to buy their product, he stated. The money that would go toward cosmetic and toilet preparations, he felt, is thus lost to other consumer goods.

Differences in Income Groups

A second big mistake in many cosmetic advertisers' approach, Mr. Martineau said, is that they overlook the differences in personality in the various income groups. Also, he pointed out, they assume that it is possible to sell the upper classes and then let these sales ideas trickle down to the middle income group.

The mass market cannot be reached in this fashion, Mr. Martineau declared, because it forms its own opinions and tastes, which do not, at many times, coincide with those of the upper classes. Instead, he continued, it is necessary for cosmetic advertisers to go down to the middle and lower income groups directly and educate them to the use of its products.

Mr. Martineau moved on to a discussion of the market for men's toiletries and cited it as another area that is not fully developed. He noted that the time is ripe now for fuller development of this potential for the reason that many of society's concepts of masculinity have changed. More stress is now placed on brains than on brawn as an indication of masculinity, in Mr. Martineau's view. Advertising can thus use different symbols in educating men to its products than it formerly could.

In summarizing his discussion, Mr. Martineau declared that customers must be thought of as human and not as purchasing agents. In this way, cosmetic advertisers can work on the prime motivating force, emotions, and expand the market that would be lost to other consumer industries.

Women's Spending on Cosmetics

While women are spending more dollars for toilet goods than ever before, they are spending fewer of the dollars they actually could be spending—a smaller share of their disposable income—it was pointed out by Eleanor Hagstrom of the *Ladies Home Journal*.

Major competition, she felt, comes not from competing brands but from food, automotive, appliance and other advertisers who have gone all out both creatively and economically to make women conscious of a need rather than a desire for their products.

Miss Hagstrom was of the opinion that toilet goods advertisers may find a part of the solution to this problem in a better understanding of the way of life of the women who buy their products and a greater emphasis on those particular emotions which can be translated most readily into buying urges.

In most women, she continued, these emotions are based on a will to succeed in the myriad functions which today's society has placed upon her—wife, mother, nurse, housekeeper, hostess, clubwoman and teacher. She felt that they are based to a much lesser degree on a super-romantic vision in super-idyllic surroundings.

Things Women Want Most

The things a woman wants most, Miss Hagstrom said, are, first, her husband's love; second, her children's admiration; third, her fair share of attention, and fourth, the acknowledgement of her feminine attractiveness. These things, she said, will inspire her to action. They are also the things which will induce her to buy, the speaker added.

The advertiser will succeed who builds his campaign on the firm foundation of an appeal to these emotions and who has, in addition, an understanding of a woman's language plus an accurate picture of her daily routine, Miss Hagstrom declared. The latter, she indicated, is especially important, because of a fallacy in the popular conception that women have greater leisure time than ever before. This conception is valid only in the minds of economists, she asserted, adding that in the minds of women, leisure time has been reduced rather than increased by the ever-greater demands of what she considers non-leisure activities.

Based on comments from thousands of *Journal* readers, Miss Hagstrom advised the toilet goods makers to provide women with more "how to use it" information wherever possible and more realism in their appeal.

"A woman is moved to action only by those things which affect her personally and directly," Miss Hagstrom concluded. "She can project herself into your ad only if you build her a strong enough bridge of realism. Remember, she doesn't really want to be the siren in your ad, she only wants to look like her."

Buying Motivation Described

The American consumer is eager to purchase those products that gratify for "finesse in living," Dr. Ernest Dichter, president of the Institute of Motivational Research, Croton-on-Hudson, N. Y., told TGA members.

He pointed out that Americans, feeling secure and optimistic in our present economy of abundance, have rid themselves of their former puritanical restraint and are anxious to "let out all the stops" and get more fun out of life. Dr. Dichter emphasized that advertising, sales approaches and products would succeed or fail depending upon whether they fit in with the new psychological "climate."

"The sale of a soap, of a perfume," he explained, "is importantly influenced by the hopes, fears and dreams of human beings as they exist in 1955 and as they will exist in the next few years. So modern research must point to the future, and concentrate not only on what is but also on what is going to be.

"To do this," he went on, "it must concern itself more with basic, deeper, and more emotional trends in the public's changing psychology. Each of these trends has a direct application in the selling, merchandising and advertising of toilet goods."

"Our institute studies have shown," Dr. Dichter reported, "that many people are ready to accept new products and new ideas that promise them a happier, more

Charles of Ritz, Gray Welch Award Winners

Charles of the Ritz, Inc., New York, and Dorothy Gray, Ltd., New York, received the Charles S. Welch memorial packaging awards for 1954, the former for the best package in the competition selling at a retail price of over $1 and the latter for items selling at $1 or less. The winning packages were the Charles of the Ritz "Ishah" line of perfume, toilet water and dusting powder and Dorothy Gray's "Figurine" line of cologne, cream sachet, cream deodorant, hand lotion and combination of cologne and hand lotion. Richard Salomon accepted on behalf of Charles of the Ritz, while Joseph Keho accepted for Dorothy Gray.

Specialists
IN THE CREATION OF
PERFUME ODORS
Exclusively

Whatever your product, the subtle touch of the Expert Perfumer has the power to enhance it with the perfect fragrance that it deserves. That's why it is so important to entrust the perfuming of your products to a Company who specializes exclusively in creating the right fragrance for each type of product. For only by specializing in perfumery alone, can one achieve the experience and "know-how" that marks the true perfume expert. Our laboratories and expert perfumers are ready and willing to serve you.

AROMATIC PRODUCTS, Incorporated
15 EAST 30th STREET • NEW YORK 16
CHICAGO • DALLAS • MEMPHIS • PITTSBURGH • LOS ANGELES • BOSTON
MEMBER • FRAGRANCE FOUNDATION

Arthur C. Fatt

refined life. Price is no longer the key factor. The higher-priced soap or perfume—as long as it satisfies a psychological or emotional need—will find greater acceptance."

He cautioned his listeners that the public's "changed and changing" psychology must not be misconstrued as an easy target for manufacturers products. "People in general have become more mature," he said, and they demand that their sales stories be told in adult terms, in terms of their own level of sophistication and of their emotional needs."

He went on to stress the need for manufacturers and advertisers of toilet goods to take cognizance of the consumer's desire to express his own individuality. If he can get individuality only through mass production, the consumer will accept it, provided it has the stamp of individuality. "The brand of soap or shampoo has to be presented in such a way," he suggested, "that the buyer—both male and female—can feel that it is the product expressly designed for her or him."

Another trend in the citizen's changing psychology, Dr. Dichter continued, is his new awareness of his own power and importance, and his belief that he is at least partially responsible for whatever progress the country, in general, and business, in particular, has made.

Cosmetics Advertisers Cautioned

"Advertising, particularly in the cosmetics and drug industry must take careful notice of this new attitude. In some of our drug and toiletries studies, we discovered that too many advertisers try to take credit for a particular cure or cosmetic help they have provided. Consumers, however, will insist on getting credit for their selectiveness and intelligence in picking the right product."

These changing trends in the consumer's psychology will have to be learned and acknowledged by advertising and promotion, particularly in the toilet goods field, Dr. Dichter concluded. Future appeals and approaches to the consumer will have to be reconciled with the general direction in which, as motivational studies reveal, the public is thinking and dreaming.

Arthur C. Fatt, executive vice-president of Grey Advertising Agency, New York, took a look into the world of 1970 to see what the marketing, advertising and selling of cosmetics and toilet goods would be like fifteen years from now.

He predicted that the leading factor in retailing, the department store, in 1970 "will no longer be the one-stop shopping giant dominating a congested commercial area in an urban center." Instead he expected it to be typically "a multiple store operation sometimes local, often regional and in some instances national."

Giant Store to Disappear

"In the suburbs which fringe large cities," Mr. Fatt continued, "the total of the department store's volume in the branches will surpass the main store by a wide margin. More and more stores will be located in huge regional shopping centers and many such centers will replace the old giant department store."

Quoting a market letter distributed by his concern, the speaker pointed to another aspect of the coming revolution in department stores:—"The retail revolution brought about by decentralized shopping means that department stores can no longer afford to serve every family need. The profitable department store of the future will no longer pretend to be headquarters for everything from shoelaces to spatulas. It will instead become a 'holding company' for a series of upper-grade speciality shops under one roof. The branch store is beginning to set just such a pattern."

Because of this change, the speaker felt the department store would have to change some of its selling technics. For one thing, he thought it would be compelled to develop stepped-up mechanization in handling and selling merchandise and in making it easier for customers to choose and buy. "There is no doubt," he asserted, "but that electronic selling will be one of the most important factors in merchandising and selling by 1970."

Creative Development of Items

"What about the department store's role in creatively developing items in partnership with resources?" Mr. Fatt asked. "There is a difference of opinion on this score. Some believe that the department store will be able to devote more attention to the creative development of items with manufacturers and will continue importantly as a powerful influence in creating demand for new products.

"I am inclined to disagree. I am convinced that the breaking up of the huge department store into many stores will reduce its creative influence. Instead, I see a sharper delineation of the functions of the manufacturer and the retailer with the producer assuming more and more of the responsibility for creating demand for this product and the retailer devoting his primary efforts to distribution; that is, making these products available to the consumer. In 1970, the manufacturer will play the dominant role not only in manufacturing merchandise, but in manufacturing customers."

As to retail advertising, the speaker declared, "I see a realignment of retail advertising in 1970 in keeping with a realignment of media. The newspapers will have to find ways of fitting their circulation to the changes in marketing areas. If the development of branch stores means a crossing and overlaying of market areas, newspapers will adjust themselves to realities. For with the mother store playing a less dominant role, and population concentrated in areas now serving the mother store being dispersed, it will become necessary for newspapers to adjust their distribution through mergers, consolidations, regional editions and other plans which will give adequate coverage of new residential areas.

Newspaper as Advertising Force

"The newspaper will remain a dominant retail advertising force," Mr. Fatt continued. "But it will face strong competition from local television stations covering the newly-created residence zones. These television stations will make complete use of newly-developed technics to bring three-dimensional pictures and demonstrations of products right into the homes Customers will be able to shop in their favorite stores without traffic or parking problems and get there instantly without even leaving home."

House-to-House vs. Wholesale Selling

Mr. Fatt expected that the line dividing manufacturers who today sell house-to-house exclusively from those who sell through wholesalers and retailers will tend to disappear in fifteen years. "Today's house-to-house companies," he amplified, "will seek to broaden their distribution through retail channels and the traditional retail distributors will woo house-to-house selling."

"The drug store," he continued, "will be with us in 1970. Giant drug chains will continue to grow and expand in numbers and in size, and in the variety of the merchandise they handle. However the line of demarcation between them and the variety store and the junior department will tend to disappear. Automation will play a larger part in their operations just as in the department store and in the variety store. But as we look into the future there is no reason to believe that the chain drug

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testing guarantees the purity of U.S.I. ALCOHOL

Sniff tests, spectrophotometric analyses, and many other delicate chemical testing procedures assure U.S.I. customers of specially denatured alcohol that is always uniform...always of the same high quality and purity. An unquestioned purity, *second to none*, which protects your investment in expensive ingredients used in the manufacture of perfumes, colognes, and other toilet goods.

High purity alcohol means important sales advantages for you, too – toiletries that please the most discriminating customers; customer satisfaction that means repeat sales for your products.

You can place your confidence in the *proved quality and purity* of U.S.I. Specially Denatured Alcohol. And prompt, dependable service, with particular attention given to short notice deliveries, is as near as your telephone.

You can rely on U.S.I. Specially Denatured Alcohol

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For: perfumes and colognes; face and hand lotions; soaps, shampoos, shaving creams; hair and scalp preparations; deodorants; and all kinds of toilet goods.

USTRIAL CHEMICALS CO.
Division of National Distillers Products Corporation
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Branches in Principal Cities

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251A Coxwell Ave., Toronto 8, Canada

PERFUME MATERIALS
ESSENTIAL OILS
AROMATIC CHEMICALS
FLAVORS

store's role in our distribution picture will change materially."

As for the supermarket, he predicted that every supermarket and many small independent food stores will have health and beauty aid departments in 1970. Supermarkets, in fact, will have very large health departments, he felt.

"I believe," Mr. Fatt stated, "that their share of the market in items such as tooth pastes, cotton, aspirin, laxatives, shampoos will grow because the number of supermarkets will grow. But I don't believe that in 1970 the supermarket will surpass the drug store, variety store and department store as an outlet for cosmetics, perfumes, toilet accessories and related items as long as the supermarket retains its primary function as a distributor of food."

In his look into 1970, Mr. Fatt saw automation taking over in stock control. He was of the opinion that automation all along the merchandising line will tend to cut costs. "The result," he felt, "must be drastic lowering of historical mark-ups. It is inevitable. The trend in this direction is here and will be increasingly strong as we go along toward 1970. In fact the whole philosophy of thinking in mark-ups only in percentages will give place to figuring mark-ups in dollars and cents. The trend has already begun."

Advertising in Fifteen Years

What kind of advertising will there be fifteen years from now? Mr. Fatt put it this way:—

"More dynamic, more powerful, more spectacular than we can even dream of today. We can see it in the making. We can see bigness, speed, dominance. We can see a complete revolution in media and methods. Not that any of our present media will disappear, but they will take on new forms, develop new technics and with them new power to sway larger masses of people than our minds can encompass today."

The speaker saw the wholesaler assuming a more important role in a manufacturer's marketing plans. Why? "Because," Mr. Fatt said, "the expansion in the number of stores serving an expanded number of people in an expanded number of shopping centers will make it impractical for the manufacturer large or small to cover the outlets through which his merchandise can be sold."

On the manufacturing scene, he saw such things as a new type of cosmetic to fit into 1970's new wireless lighting which "will change the color scheme of a home with a light to suit the mood of the occupant," new type soap products to take advantage of built-in soap attachments, "a complete change in the traditional reluctance and inhibition of males towards the use of toiletries and cosmetics," a change in standardized package sizes to fit the needs of standardized bathroom space in pre-fabricated homes and the opening up of new foreign markets.

How to Prepare for World of 1970

To prepare for this new world of 1970, Mr. Fatt came forward with the following ten suggestions:—

- Appoint a "Marketing Man of the Future" . . . to study every development which may affect your future business.
- Keep a keen eye on the research being done in the industries from which you obtain your raw materials.
- Watch the industries unrelated to yours. A maker of synthetic fibers may come up with a by-product which will open a new field for you.
- Arrange with a college to carry on research for your company, even if you have to endow a special professorship. The laboratory is the gateway to greatness in the years ahead.
- Motivation research will make great strides . . . use its force to help you develop products the consumer indicates he or she needs . . . and ahead of competition.
- Introduce automation in your operation to be prepared for the demands of the future.
- Keep your eye peeled on the revolution in retailing and be ready quickly to adapt your marketing and merchandising to its changing complexion.
- Be among the first, not the last, to experiment with selling your products through vending machines.
- Attune your thinking to the bigger and more powerful role advertising will play in the marketing of products of the future.
- Think and plan on a bigger and broader scale so that you will not be left behind in America's march of tomorrow.

Scientific Section Meeting

At the scientific section meeting on May 12, eight papers were presented detailing recent technological advances. Reporting on "Allantoin in Cosmetics Formulations," S. B. Mecca, chemical director for Schuyl-

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Hundreds of formulas for different types of wax in our files prove that Allied builds the wax formula to suit the product—

- for any temperature—warm or cold
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- for any method of application—laminating, brush, roller-coating or spraying in any form—in slabs, drums or solution

Allied starts in where others leave off in the compounding of special waxes. Our highly skilled staff of laboratory technicians—are constantly delving into new applications...new fields of use. Allied will take any wax problem, and give you that worthwhile *extra* in service and results.

STANDARD ALLIED WAXES

MICRO-CRYSTALLINE WAXES: For laminating and dipping purposes, wax-coatings, moisture-proofing, glassines, paraffine-extenders, etc. M.P. 130°F. up to 200°F. In olive-green, amber, natural yellow and white colors. Needle penetrations at 77/100/5 from 3 to 95.

CERESINES • OZOKERITE WAXES

AND OTHER BRANDS

BEESWAXES:
Synthetic and natural—bleached, chemically or naturally, U.S.P.

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For No-Rub Floor Waxes and Carbon Papers.

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AGENTS AND WAREHOUSE STOCKS IN PRINCIPAL CENTERS

ATLANTA — Deeks & Co.
BALTIMORE — Warner-Graham Co.
BOSTON — Mulcahy & Griffin
BUFFALO — Wetherbee Chemical Co.
CHICAGO — Philip E. Cole Co.
CINCINNATI — Deeks & Co.
CLEVELAND — Norman G. Schabel Co.
DETROIT — D. H. Osgood Co.
HOUSTON — Joe Coulson Co.
KANSAS CITY — John T. Kennedy Sales Co.
LOS ANGELES — E. B. Taylor Co.
LOUISVILLE — Deeks & Co.
MONTREAL, CAN. — Wm. J. Michaud Co., Ltd.
PHILADELPHIA — Lees & Dilworth, Inc.
PORTLAND, ORE. — Miller & Zehrung Chemical Co.
ST. LOUIS — Harry G. Knapp
SAN FRANCISCO — E. M. Wells
SEATTLE — Carl F. Miller & Co.
TORONTO, CAN. — A. S. Paterson

Charles T. Lipscomb, jr.

Re-Elected Vice-President

kill Chemical Company, Philadelphia, pointed out that a description of glyoxyl diureide, commonly referred to as allantoin, might start by calling it a valuable cell-proliferant healing agent which stimulates healthy tissue formation.

But, Mr. Mecca added, it is also a chemical debrider of necrotic tissue and serves to "clean up" the areas where applied. And, when such an agent can further be described as bland, stable, non-toxic, soothing and non-irritating, it becomes a tool of more than casual interest to the dermatologist and cosmetic chemist.

Mr. Mecca went on to describe allantoin's history. Its natural predecessor, comfrey, was described by Dioscorides as early as 200 A. D., he said. The healing qualities of comfrey, it was pointed out, were mentioned in various herbals and materia medicas in the seventeenth and eighteenth century.

Comfrey's Relation to Allantoin

It was not until 1912, the speaker indicated, that Macalister discovered that the healing properties of comfrey were attributed to allantoin. Since then, he said, numerous papers have appeared giving scientific evidence not only of allantoin's remarkable healing property but also the various other attributes which enhance its efficacy. Allantoin has been used by the medical profession for almost fifty years, Mr. Mecca emphasized, and throughout this half century, he said, he had found no reports of untoward reactions.

The most outstanding quality of allantoin, it was noted, is its cell-proliferating action which is responsible for its healing effect. It has been called a chemical debrider which means that it has a cleansing action by removing necrotic tissue.

After conducting tests on coagulation time of blood, Mr. Mecca reported that following allantoin irrigations, coagulation time fell from two and a half minutes to half a minute. This, he said, indicates that allantoin possesses a hemostatic quality.

Allantoin, it was also noted, is likewise fast-acting—the speed with which it converts a necrotic base into a granulating area was termed remarkable. Of no little importance, the speaker said, are the many reports mentioning that allantoin is non-irritating, safe, odorless, stainless and soothing.

Mr. Mecca included in his discussion suggested formulations utilizing allantoin in lotions, creams, lipsticks, etc., and explained the chemistry of the material.

Review of Acid Mantle of Skin

Dr. Irvin I. Lubowe of New York University Bellevue Medical Center, presented a historical and physiological review of the acid mantle of the skin. He said that a fine protective film is present on the skin which has a pH of about 5.5 and is due to lactic acid, fatty acid, electrolytes, amino acids, keratin, uric acid, oleic acid, acid salts and constituents of sebum.

The buffer capacity of the skin, Dr. Lubowe emphasized, is very important in maintaining normal skin function. Alterations in the normal pH of the skin are observed in various dermatoses. In the soap and alkali detergent dermatoses, he went on, the ability of the skin to neutralize the residual alkalinity is reduced. Laboratory studies with the improved Beckman potentiometer, he said, have been conducted to find out the effect of regular soap, superfatted soap, cake detergent, and transparent soap upon the acid mantle of the skin. Dr. Lubow also reported on the ability of the acid-buffered lotions and creams to restore the normal pH of the alkalinized epidermis.

Fifty-five patients with dermatitis venenata due to household cleansing agents, he reported, were successfully treated with routine dermatological therapy, including antiseptic compresses, steroid-antibiotic ointment, and superficial X-ray. After the patients were cleared of their dermatoses, he went on, we were able to maintain them with the prophylactic use of 15 percent silicone concentration dispersed in an acid buffered absorption ointment. Occasional sensitization to the acid buffered creams was observed. However, he added, with continuous use, the sensitization disappears. The effectiveness of universal use of acid buffered creams, lotions and cosmetics, he concluded, has not been determined to date.

Penetration of Topical Agents

Dr. Peter Flesch of the University of Pennsylvania School of Medicine's department of dermatology described a new test for studying the penetration of topical agents through human skin. All previous methods, it was noted, have applied to living subjects. In the new test human skin from surgical or autopsy specimens is treated with the ointment or lotion to be tested and incubated for several hours at body temperature.

The epidermis is then removed. Two types of tests may be carried out in these specimens, Dr. Flesch indicated. First of all, spot tests may be made in the corium and, then, chemical analyses of the isolated epidermis may be conducted. With these methods, it was stated, the penetration of substances incorporated in different bases or of related compounds may be easily estimated. Within the same strip of skin, it was said, the results obtained are consistent.

Role of Percutaneous Penetration

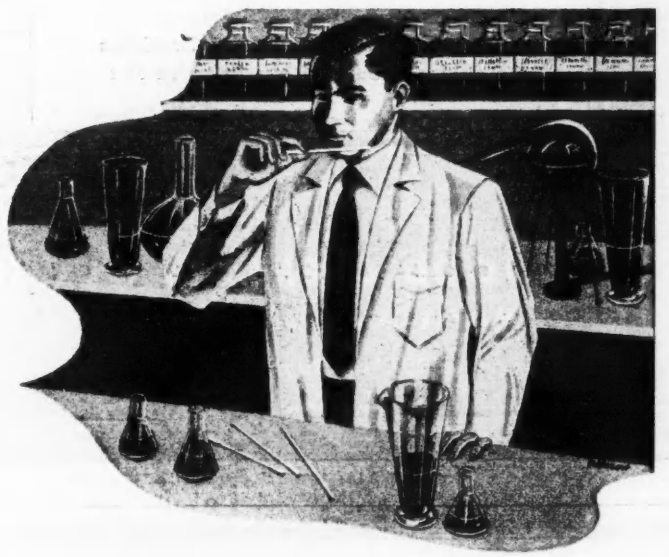
For purposes of cosmetic research, percutaneous penetration plays a minor role, Dr. Flesch said. Nevertheless, he continued, it is conceivable that the test may serve as an index of the affinity of cosmetic preparations for the skin surface. The main advantage of this test, it was stated, is objective in nature.

The effects of topical preparations are not judged by subjective clinical criteria, but expressed in an accurate numerical way. Since there is a great need for objective methods to test the efficacy of topical preparations. Dr. Flesch hailed the new technic as a step in a direction where much remains to be accomplished.

Discussing the action of agents used for the relief of dry skin, Dr. Irvin H. Blank, research associate in dermatology at Harvard Medical School and associate biochemist at Massachusetts General Hospital, pointed out that the skin becomes dry in stages. Mild dryness, he indicated, is the lack of flexibility of the stratum corneum, the outermost layer of the skin, and the sealing of this layer with the resulting roughness of the surface. Severe dryness or chapping was explained as an increased thickening and scaling of the stratum corneum with breaks through the entire epidermis, redness due to vasodilatation, and perhaps some swelling and pain.

The major factor which initiates dryness, Dr. Blank said, is the loss of water from the stratum corneum which makes it brittle and causes it to break and scale. Chemical and physical stimuli enter these breaks and irritate the living cells. Inflammation follows.

Cosmetics which prevent or relieve dryness, the speaker went on, act primarily by increasing the water content of the stratum corneum. They may function primarily by supplying an occlusive, continuous film on the surface of the skin which will prevent loss of water by evaporation to the environment (emollients) or by aiding the stratum corneum in attracting water from the environment



THE Fifth* Sense

(Olfactive sense)

Since 1768, or nearly 200 years, the House of Chiris
has dedicated itself to the Fifth Sense—the olfactive sense
in the development of Essential Oils, Floral Absolutes, Chemical Isolates
Synthetic Chemicals, and all of those creations and specialties
which combine industrial aromatics with natural products
and produce fragrance, the House of Chiris has a cherished history.
Today Chiris maintains laboratories headed by experienced
olfactive chemists who have available to them
not only the "know how" of generations of Chiris chemists
but also the research facilities of three continents
and four modern laboratories located in:
FRANCE—GRASSE & PARIS; GREAT BRITAIN—LONDON;
BRAZIL—SAO PAULO and NEW YORK CITY
Whether Essential Oils, Isolates, or combinations thereof,
are used as fragrance constituents by the perfumery,
soap, cosmetics, or allied industries,
we are happy to be consulted.

*Chemical Senses, page 1, Moncrief—lists senses as follows: "sight, hearing, touch, taste, smell." Note smell is listed Fifth.

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220 EAST 23rd STREET, NEW YORK 10, N. Y.
GRASSE • PARIS • LONDON • SAO PAULO

FOR THE COSMETIC INDUSTRY

MAYPON 4 C

PROTEIN — FATTY ACID — CONDENSATE

Anionic sudsing agent, detergent, and emulsifier in the production of

SHAMPOOS • COLD WAVE SOLUTIONS
LIQUID BATH PREPARATIONS
COSMETIC CREAMS

In all concentrations, Maypon 4 C satisfies the Draize-Woodward eye irritation test

MAYWOOD CHEMICAL WORKS
MAYWOOD, NEW JERSEY
ESTABLISHED 1895

(demulcents). Mineral, animal and vegetable oils function as emollients; glycerine and sorbitol function as demulcents.

Emollients Compared to Demulcents

Each of these class of agents, Dr. Blank added, also functions by causing the surface to be smoother, and by protecting the skin from further chemical and physical stimuli. The emollients were said to be better protectives than the demulcents. Neither of these classes of agents functions primarily by replacing a deficiency of natural oils, the speaker noted.

Discussing a new method for spectrophotometric evaluation of sunscreens, Saul I. Kreps, chief chemist of Van Dyk & Co., Belleville, N. J., noted that valid evaluation of sunscreens and commercial suntan preparations has been limited to field tests. This procedure, he pointed out, is complicated by variations in climate, geographical location, individual response and by non-standard procedure during tests.

As a result, Mr. Kreps said, meaningful tests require the use of large panels of subjects. Since they are expensive, time-consuming and difficult to conduct, he continued, the need for a rapid instrumental method of testing which can be correlated with actual use is obvious.

Such a test, he reported, is developed, employing spectrophotometric measurement under standard conditions, of the transmission factor. This quantity, it was explained, is a physical characteristic of any preparation which is independent of absorbing screen concentrations and film thicknesses. It is equivalent to the ratio of intensity of radiation transmitted by a standard film to the intensity of the original radiation falling on the film.

Application of Transmission Factor

This transmission factor, Mr. Kreps continued, is applied to the known intensity and eryethemal efficiency of noonday, mid-summer sunlight over the wavelength range including 2900 and 3400 Angstrom units. The intensity of erythemally effective radiation that would pass through the preparation is thereby derived, it was pointed out. The relative amount of protection from painful sunburn afforded by the suntan preparation is inversely proportional to this amount of effective radiation transmitted.

The relative rate of pigmentation of the skin, it was noted, is proportional to the amount of radiation passing through the suntan preparation in the range of 3200 to 3750 Angstrom units. The relative rate of pigmentation is calculated by a procedure similar to that used to calculate protection against erythema.

Absolute evaluation of suntan preparations can also be derived from the relative results calculated, it was stated. Mr. Kreps closed by presenting data for the evaluation of a number of commercial suntan preparations which agree closely with observed use in the field.

Study of Anti-Dandruff Agents

In reporting on a microbiological and clinical study of anti-dandruff agents, Dr. Herbert J. Spoor, assistant dermatology professor at New York Medical College, noted that dandruff or scaly disease of the scalp has been treated quite satisfactorily by many types of cosmetic preparations or anti-dandruff agents.

Dr. Spoor contended that many of these agents may have merit even when measured by the rigid therapeutic and laboratory criteria demand for ethical products used in the treatment of seborrheic dermatitis, a form of severe scalp disease. In his report he attempted to standardize a method of study for all anti-dandruff agents so that not only may each receive its full therapeutic credit, but also so that one agent or product may be efficiently compared with or evaluated against another.

He said that several factors govern the rate and character of the accumlation of scalp debris commonly known as dandruff —the rate of epidermal desquamation, the amount of sebaceous secretion and the degree of microbial contamination. An effective anti-dandruff agent must remove and delay the return of scalp debris, Dr. Spoor indicated. To do so, he said it must aid desquamation, minimize excess oil secretion and reduce the numbers or change the characteristics of the bacteria of the scalp.

Exacting Criteria Lacking

Use tests upon normal people and concomitant bacteriological studies alone have not given sufficiently exacting criteria with which to compare anti-dandruff agents, the speaker reported. He indicated that his group's methods now consist of a clinical trial of the agent on seborrheic individuals, combined with measurements

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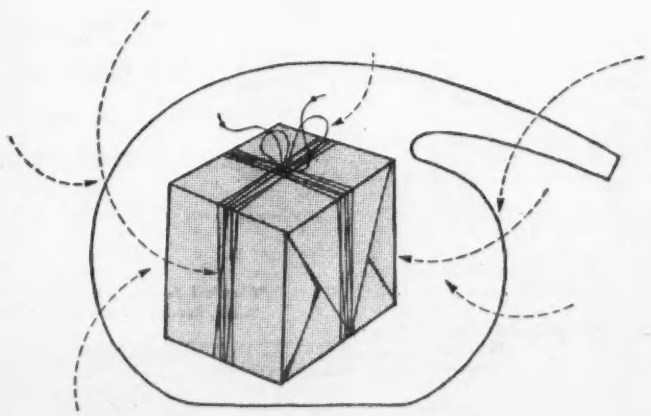

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of the bacteriological effectiveness of the agent against the microorganisms of seborrhea both in the laboratory and in use. Dr. Spoor reported on comparative studies, showing the methods used to evaluate various types of ethical and proprietary antidandruff agents.

Phyllis J. Carter and William C. Griffin of Atlas Powder Company, Wilmington, Del., reported on cosmetic emulsions in polyethylene containers. They pointed out that polyethylene bottles are often used for cosmetics because of added sales appeal. However, it was noted that the use of polyethylene as a packaging material sometimes presents serious difficulties for the formulator because the materials packaged sometimes deform the polyethylene containers.

They reported on a brief study showing the effect of some typical cosmetic ingredients, other than perfumes, on one type of polyethylene and discussed the effect which emulsification has on the polyethylene softening properties of one of these materials.

Dr. M. S. Carpenter of the Givaudan Corporation, Delawanna, N. Y., discussed new polycyclic musks. Starting off with a brief resume of the history of synthetic musks, including the nitro and macrocyclic types, Dr. Carpenter went on to discuss the research work done on musks in the Givaudan laboratories and, in particular, reported on the discovery there of the new polycyclic types of musk.

The latter, it was pointed out, include dicyclic types such as substituted tetrahydronaphthalenes and indans and tricyclic types as well. Dr. Carpenter examined the influence of varying substituents upon musk odor in these series and also described the properties of polycyclic musks. He also revealed the structure of Givaudan's "Versalide" musk.

Cosmetic Chemists Report Technical Advances

—Continued from page 5

must be submitted to the Food and Drug Administration before marketing is permitted.

Bacitracin is a certifiable antibiotic, and products containing this drug require certification with the FDA's division of antibiotics. However, it was added, the plain ointment of bacitracin for use as a pharmaceutical product has now been decertified, although such ointment is still subject to approval of the federal agency.

Acetylated Lanolin Derivatives

In a joint paper on acetylated lanolin derivatives, Lester I. Conrad and Kalman Motiuk of American Cholesterol Products, Inc., Milltown, N. J., called attention to the fact that the past few years have seen a greatly expanded interest in lanolin and its derivatives. A review of the literature on lanolin reveals, they said, that up to the present time derivatives have been prepared by reactions involving the unsaturated bonds and ester linkages.

The acetylated lanolin derivatives was seen as representing a practical application of recently developed concepts of lanolin composition. They are prepared by reacting the hydroxyls to form acetylated lanolin hydroxyesters and alcohols, the chemistry of which was described in detail by the speakers.

It was pointed out that they have been introduced into the fields of cosmetics and pharmaceuticals because of their interesting new properties. Physical and chemical data along with dermatological characteristics were discussed in addition to formulation in various types of cosmetic preparations.

Morton B. Epstein of Onyx Oil & Chemical Company, Jersey City, N. J., discussed foam transition and foam persistence. Some aspects of the choice of detergent materials satisfactory in cosmetic preparations where foam is involved were explored by the speaker. He also considered elementary properties of foam and outlined experiments with the flow of detergent solution through a column of foam at various temperatures, showing the effect of transition due to the presence of additives. He tied in the results with foam persistence.

Transition Temperatures

A. Wilson of Colgate-Palmolive Company, Jersey City, discussed "Film Properties and Compound Formation in the Sodium Lauryl Sulfate-Lauryl Alcohol-Water System." Essentially a review of previous work, Mr. Wilson dealt specifically with some quantitative aspects of experiments which are useful to cosmetic chemists for the evaluation of foam prop-

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erties by single film technics. He gave the general requirements for the production of slow-draining foams and films (known in the trade as "creamy") and fast-draining films and foams ("lacy").

He discussed the nature of the interactions between detergents and long-chain additives which lead to the formation of slow-draining films of high surface viscosities and offered a simple explanation of the detailed results.

Film Draining

Mr. Wilson presented film draining transition temperatures at which slow-draining films become fast-draining for the sodium lauryl sulfate-laury alcohol system and correlated the results. The film drainage transition temperatures decrease with increasing detergent concentration at fixed alcohol concentration, it was reported. At constant detergent, addition of alcohol causes an increase in the transition temperature to a maximum value beyond which further addition results in little or no increase.

In a discussion of social and economic aspects of skin geriatrics, E. Henderson of Schering Corporation, Bloomfield, N. J., remarked that modern society is undergoing a revolution. In conquering poverty and disease, he said, science has extended the human life span so that the average person can expect to live to what in years past would be considered a "ripe old age."

Medical and cosmetic science, Mr. Henderson went on, is now trying to make these added years productive and happy ones. Medicine's contributions to a serene old age, he said, are well-known—wonder drugs, diet, therapy, etc. The role of cosmetic chemists in geriatrics, the speaker felt, is less publicized but no less important. Older people not only live in a world where the accent is strong on youth, he said, but they must also compete in it and they are acutely aware of the handicaps—in business and social activities—of an "old" appearance.

Cosmetic Science and Old Age

Cosmetic science, Mr. Henderson said, is currently attempting to repair and prevent the ravages of age and environment on skin. It tries to outwit nature by its hormones and estrogenic creams which nourish and revitalize skin. It offers safe hair-coloring agents to mask gray hair. It supplements the medical profession's work in the field of general health with the theory that confidence in the attractiveness of one's appearance relates markedly to the overall well-being of old as well as young people.

Such approaches are more than frivolous sops to human vanity, the speaker contended. They reach below the surface benefits and touch the psychological aspects of growing old happily and purposefully, he argued. The older person who is healthily pleased with his own appearance, Mr. Henderson maintained, will live at peace with himself and society. Thus, cosmetic science, in working to enhance the appearance of our older population, is doing much to make old age a state to be anticipated rather than dreaded, he concluded.

Warren Andrew of Wake Forest College's Bowman Gray School of Medicine, Winston-Salem, N. C., discussed "The Anatomy and Histology of Aging Skin." While gross changes with age are more conspicuous in the skin than in many other parts of the body, an analysis of microscopic changes and of processes occurring is not an easy job.

Cell Division in Young and Old

Mr. Andrew indicated that in human skin in old age an atrophy of the cellular covering, or epidermis, occurs, with a loss of the ridge-like downgrowths of cells which are numerous in young persons. A general flattening out of the epidermal layer seems to occur, he said, but some of this may be due to less shrinkage of older skin on removal. The speaker noted the interesting fact that more cells are dividing in epidermis of old persons than of young.

The phenomenon, he believed, may have some relation to the greater incidence of malignancies, both of basal cell and squamous cell type, in older people. Of considerable importance, too, he felt, may be the difference at different ages in the outermost layer, which is composed of dead, cornified cells. In young individuals this layer is made up of loosely adherent plates; in senile individuals these plates are closely adherent to each other. In the epidermis at all ages there are present some cells which are "migrants" from the dermal layer.

Action of Hormones Cited

Mr. Andrew discussed the appearance and possible role of these cells. He gave some evidence in the dermis for some changes in elastic and collagenous fibers and attempted to evaluate conflicting findings. He stressed the close relationship of the condition of the skin to the function of the endocrine glands by indicating some apparent "rejuvenative" effects brought about by treatment with hormones and also the changes in skin in diseases involving deficiency of hormones.

Discussing the chemistry of aging skin, Dr. Peter Flesch of the University of Pennsylvania's department of dermatology, Philadelphia, indicated that it is impossible to attribute the distinctive features of old skin to any special change in chemical components. The dry and chapped skin surface, although suggestive of an abnormal keratinization, has never been studied from a chemical point of view, he noted.

Chemical Changes in Aging Skin

The only fairly well established chemical changes which occur in the aging skin, he declared, are increases in the calcium and water content. The profound morphological and histochemical alterations in the elastic and collagenous fibers, which are reflected in the wrinkling and deceased elasticity of the aging skin, have never been explained on a chemical basis, he added. Until further chemical studies will be carried out, Mr. Flesch contended, it is futile to expect any rational method for the "rejuvenation" of aging skin.

Chesebrough Manufacturing Chooses Chairman, President

Election of a new chairman of the board and a new president was announced last week by Chesebrough Manufacturing Company Consolidated, New York, makers of "Vaseline" brand products. Arthur B. Richardson, president since 1944, was named chairman and Jerome A. Straka, executive vice-president for the past year, is the company's new president.

Clifford W. McGee, retiring chairman of the board, will continue to serve as a director. Mr. McGee has been an officer of Chesebrough since 1911, serving as vice-president since 1923, when he became president of the the company. He had been chairman since 1937.

Re-elected were Basil L. Emery, vice-president, Robert C. Fuller, vice-president; Charles E. Klein, treasurer; Frank J. McGroarty, secretary; William J. Haggerty, assistant treasurer, and Edith V. Blauvelt, assistant secretary.

A consolidation was recently approved by the directors of both the Chesebrough Manufacturing Company and Pond's Extract Company. Directors of the two companies have approved submission of Agreement of Merger to their stockholders.

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Essential Oils, Aromatics, Flavorings

The essential oils market was quiet last week. There were only two price changes noted, both of which were downward. Bergamot and wormseed oils were reduced 25 cents per pound. The reduction in wormseed followed closely upon a similar reduction made in the preceding week. Demand for both these oils was sluggish and it appeared possible that the market would recede further. Supplies were adequate and expected to continue ample in the immediate future. The relatively quiet situation in the Far East at the moment has lessened consumer anxiety to buy at current high levels. Inventories of many consumers were generally in good shape as a result of the frenetic buying earlier this year when the imminence of war in the Formosa area threatened to cut off or seriously curtail essential oil supplies from the Pacific area. Citronella and camphor oils have eased slightly but the slightest hint of any change for the worse in the current situation in Formosa could result in a prompt jump in spot quotations.

The citrus oils group continued unchanged last week. Seasonal factors have resulted in an increase in demand but, on the whole, inquiry was below expectations to date. Other oils noted to be easier were cedarwood and ocotea cymbarum. The relaxation of firmness in cedarwood oil quotations was ascribed not only to improved supply conditions but to the fact that consumption has lessened seasonally.

The seeds and spices market continued slow last week. With a few exceptions the bulk of the price changes were downward. Among these exceptions, an advance in both black and white pepper was perhaps the most notable. It appeared probable that this increase would hold and perhaps quotations may go higher in view of higher import costs anticipated during the coming months of the Monsoon season during which time detentions of pepper are expected to increase as usual. Jamaica ginger advanced 1 cent on both available grades reflecting improved inquiry on spot. Mexican and Spanish anise seed was advanced 1 cent, rounding out the picture in this group.

Reductions in the seeds and spices market included a 5 cent decline in decorticated cardamom seed and a similar reduction in green, Ceylon seed. Cracked, Batavia cassias were off ½ cent while Indian fennel and celery seeds were down ½ cent per pound. Niger seed was reduced 1½ cent in the first change in several months while East Indian nutmeg and Jamaica pimento were off 1 cent.

Essential Oils

Bergamot—The spot market declined 25c. per pound in face of sluggish consumer demand. Prices currently ranged from $9.25 to $11.00 per pound. Supplies were adequate to meet consumer requirements and expected to continue in the future.

Bois de Rose—The market remained unchanged with prices firm at a low of $4.80 per pound. The outlook for the immediate future was for a continuation of current conditions.

Camphor—There has been a slight easing, pricewise, mainly reflecting a slow down in consumer inquiry rather than any significant improvement in the supply situation.

Cedarwood—The market appears about to break with prices heading downward. There has been no definite decline in spot quotations but trade sources appeared confident that a decline was imminent. Consumption was thought to be seasonally affected in addition to some improvement, supplywise.

Citronella—The spot market maintained a status quo situation, more or less. Price fluctuations were slight and, on the whole, quotations held unchanged. There has been some easing in demand for this oil but the tense situation on Formosa was expected to keep market prices firm in the immediate future. If the military situation in Formosa improves, citronella prices should decline appreciably.

Clove Leaf—Crude clove leaf oil was showing signs of strength following its recent downward trend. Whether this trend will continue was conjectural at this time, however.

Lemongrass—The spot market held at a low of $2 per pound. Which direction the market will take depends to an appreciable degree upon the state of world events in coming weeks. A review of the market indicated a lack of conformity of opinion as to what trend will predominate during the rest of 1955. Will the higher prices prevalent in 1954 stimulate production in 1955 to such an extent that the price spiral will tend to go into reverse? There was speculation that India, where production is non-organized and in the hands of a large number of small native distillers, will again produce a sizable amount of oil, unless adverse weather conditions interfere. Guatemala with its organized production on the other hand appears to have taken a more cautious attitude which revealed itself in the effort by the Essential Oil Association of Guatemala to make long-range contracts first and then gear their production to these commitments.

While it was assumed that the total world production in 1955 will be heavy, no prediction as to price development can be made at this date because total demand is the uncertain factor. The essential oil industry ceased to be the only heavy buyer of lemongrass oil when the pharmaceutical industry several years ago began to make Vitamin A from citral. The amount of their purchases this year may well make the difference between an abundant or merely adequate supply of lemongrass oil, it was felt.

Lime—There were no changes in this oil last week. The approach of Summer has resulted in some stepup in orders by manufacturers of flavorings used in soft drink manufacture. To date, however, overall demand has been disappointing and it was feared in some quarters that continuation of low market prices for lime oil would tend to discourage its production to a greater extent than heretofore. Supplies were adequate to cover consumer needs and expected to prevail during coming months.

Orange—There was no change on this market last week. Supplies of all qualities were adjudged ample to cover consumer needs. Consumer demand was fair although picking up seasonally.

Peppermint—The market was steady last week. Prices were firm with supplies ample, on the whole.

Petitgrain—This item was unchanged. Demand was routine and supplies adequate to cover present consumer needs and expected to continue.

Sandalwood—This market was very strong in face of continued high prices on logs from origin. The supply situation was on the tight side and prices firm.

Wormseed—Spot quotations declined

Price Trends

Advanced

Anise seed, Mexican, 1c. per lb.
Spanish, 1c. per lb.
Ginger, Jamaica, 1c. per lb.
Pepper, black, Malabar, 3c. per lb.
white, 2c. per lb.

Reduced

Cardamom seed, decorticated, Ceylon, 5c. per lb.
Guatemalan, 5c. per lb.
green, Ceylon, 5c. per lb.
Cassia, Batavia, cracked, longstick, ½c. per lb.
shortstick, ½c. per lb.
Celery seed, Indian, ½c. per lb.
Fennel seed, Indian, ½c. per lb.
Fenugreek, Moroccan, 1c. per lb.
Niger seed, 1½c. per lb.
Nutmeg, East Indian, 1c. per lb.
Oil, bergamot, 25c. per lb.
Wormseed, 25c. per lb.
Pimento, Jamaica, 1c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 14, 1954
136.36	136.41	136.84	139.82

(For Current Prices see Page 9)

Imports Detained by FDA

Week Ended May 6

New York

Black Pepper (2 lots), 160 bags: moldy.
Chillies (3 lots), 388 bags: insects.
Cloves, 26 bales: filthy
Cassia (35 lots), 4,673 bales: filthy.
Ginger (4 lots), 646 bags: wormy.
Mace (2 lots), 14 cases: filthy.
Marjoram lvs., 51 bags: filthy.
Nutmegs (9 lots), 1,078 bags: moldy & wormy.
Pimento, 21 bags: filthy.
Paprika (5 lots), 600 bags: rodent filth.
Rauwolfia Root (2 lots), 943 bags: No name of product of directions for use.
Turmeric (9 lots), 991 bags: moldy.

For Late Market Developments, See Page 4

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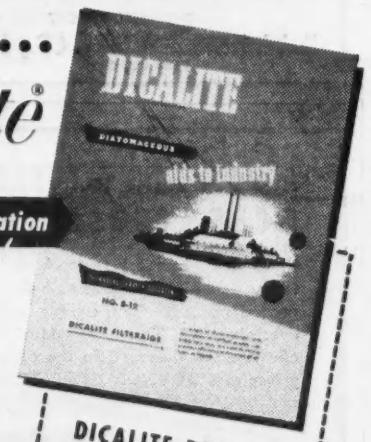

another 25c. last week, repeating the decline made the preceding week. The current market ranged from $4 to $5 per pound.

Miscellaneous

Anise Seed—The spot market strengthened last week, advancing 1c. on both Mexican and Spanish qualities. The former was currently quoted at 33c. while the latter sold at 36c. per pound.

Cardamon Seed—The spot market exhibited some weakness last week in face of continued consumer indifference. Decorticated cardamom seed was reduced 5c. per pound with Ceylon seed offered at $1.95 per pound and Guatemalan seed at $2.10. Green, Ceylon cardamon was also off 5c. and was quoted at $1.70. Other qualities held unchanged. Fancy, bold cardamom seed was quoted at $3.95 with the AA grade at $3.60 per pound.

Cassia—The cracked grades of Batavia cassia were lower last week. Inquiry has been sluggish, it was said and the reduction was reportedly a move to stimulate consumer interest. Longstick and shortstick, cracked Batavias were quoted at 17½c. and 16½c., respectively. Batavia cuttings were steady at 16c. per pound.

Celery Seed—Indian celery seed declined ½c. per pound last week and was currently quoted at 17c. French seed was steady at 40c. per pound.

Fennel Seed—Indian fennel seed declined ½c. on spot, in face of slow consumer inquiry. Prices ranged from 12c. to 12½c. per pound. Argentine fennel seed was unchanged at 17c. while Czech, medium seed ranged from 11c. to 12c.

Fenugreek Seed—Prices declined 1c. on spot last week on Moroccan fenugreek seed. The current market was quoted at 9½c. per pound. This was the first change in this commodity in some months.

Ginger—Jamaica grades advanced last week as supplies continued tight. Number 2 grade Jamaica was up 1c. at 46c. while No. 3 grade was advanced a similar amount, being quoted at 45c. Nigerian split ginger was steady at 30c.-31c. while Sierre Leone quality was priced at 35c.-36c.

Niger Seed—Niger seed declined 1½c. last week and was currently quoted at 10c.-10½c. per pound.

Nutmeg—East Indian nutmeg declined 1c. last week and was currently quoted at 38c.-39c. per pound. The decline was the first change in this item in some time and was indicative of the low rate of demand currently maintained. West Indian quality was steady at 32c.

Pepper—The market rallied last week, advancing 3c. by late in the week, for black, Malabar pepper and 2c., for white pepper. With regard to a proposition made earlier by Indian exporters that they could not guarantee that pepper shipments would pass FDA inspection during the Monsoon season, it was understood that a compromise solution has been tendered that expenses would be shared with importers here by insuring the risk of passing FDA inspection at port of entry. It was further rumored that shippers might attempt to minimize the loses experienced in the last few years by contributing a certain amount of money to a pool which would be used to reimburse those who suffer detentions. The matter is still under discussion but whatever the outcome it points to a higher cost basis on imports of Malabar during the monsoon season, May 15th through September 15th.

India's shipments during April were estimated at 680 tons. Arrivals during May will be made up of these Malabar shipments and March shipments of Lampong. The latter figure can only be guessed because reliable information on shipments from Singapore, as well as Indonesia is very slow to come out. It was estimated that May arrivals of Lampong will be close to 350 tons. The total imports will certainly not be too large. The nearby price situation looks fully steady.

Pimento—Jamaica pimento declined 1c. to 84c. while Mexican material held steady at 68c.

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BDSA's Aluminum Division Picks New Deputy Director

The appointment of Henry A. Frutig, vice-president of Aluminum-Magnesium, Inc., as deputy director of the aluminum and magnesium division of the Business and Defense Services Administration was announced last week. Mr. Frutig is a member of the BDSA aluminum smelters industry advisory committee.

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Agricultural Chemicals

The peak season for consumption of some of the large volume fertilizers was believed by the trade to have passed last week, and opinions showed some variance in retrospect as to the success or failure of this season in comparison with past years. Potash producers in noting that deliveries for the first quarter had set all-time records, were of the opinion that this year had been the best year ever.

Nitrogen producers felt that it was too early to judge sales, pointing out that demand was holding well and continuing to improve for many of the direct application materials. Anhydrous ammonia sales were in large volume for direct application, and some sources indicated that this situation had been a detriment to sales of some of the solid nitrogens, due to cheaper per-unit-of-ammonia prices for the ammonia.

Demand for triple superphosphate, which showed definite signs of easing last week when availabilibty on spot was reported, continued to edge off slightly in some areas. Normal super, which was in heavy supply, during the forepart of the season, continued in that position during the week. Phosphate rock shipments to Europe were said to have been off during the season due to high overseas freight rates.

Producers of pesticides appeared to be in a better frame of mind last week, as the market showed sharp improvement over previous reports. Business was reported good for the heavy volume items, with prices firmer than previously. Animal protein demand varied as to locale, with New York dried blood higher, and hoofmeal and tankage lower at Chicago. Old crop fishmeal slid off sharply, as sellers cleaned up stocks.

Animal and Plant Foods

Ammonia, Anhydrous—Fertilizer grade was reported moving out well for direct application. Producers conceded that the expected tight supply position had not materialized due to increased production capacity in the industry as well as cautious buying attitudes among applicators. Anhydrous aammonia was judged currently in good supply, with deliveries on contract moving in heavy volume.

The Bureau of Mines reports that coke-oven production of ammonia liquor in March rose 29.9 percent over February, amounting to 3,056,935 pounds, as compared with the February figure of 2,353,872 pounds. Production in March 1954 was slightly higher, at 3,113,558 pounds.

Ammonium Sulfate—Buying interest leveled off for domestic consumption last week. Deliveries against contract commitments were in good volume. It was noted that there appeared to be plenty of material around near producing points, and although there was not much available at ports for export, some material was reported moving toward coastal points from inland producing areas.

There were 166,258 91 pounds of coke-oven ammonium sulfate produced in March, according to the Bureau of Mines. This figure represents an increase of 15.8 percent over the 143,563,510 tons produced in February and a slightly higher percentage over output in March, 1954, which amounted to 142,926,392 pounds.

Sales of ammonium sulfate in March were higher by 44.6 percent over February, amounting to 238,052,706 pounds, as compared with 164,583,617 pounds sold the previous month. Sales in March, 1954 totaled 278,439,184 pounds. Stocks at the end of March declined 23.8 percent to 231,432,275 pounds, as compared with 303,646,903 pounds on hand at the end of February, and 147,228,200 pounds in the hands of producers March 31, 1954.

Animal Proteins—The market for animal meals showed varied activity due to demand, or lack of it, for prompt needs. Stronger inquiry sent New York dried blood to $5.50 per unit, an increase of 25c. from the previous week. In view of spotty interest, hoofmeal declined 25c. per unit, with scattered sales at $6.50 per unit of ammonia. Nitrogenous tankage displayed a range of $4.10 to $5.10 per unit, depending on shipping point. Sellers hurried to work off remaining fishmeal stocks before the beginning of the new fishing season. The market was nominally quoted at $138 to $144 per ton, depending on sellers' locations. Scrap was scarce, and quoted at $5 per ton lower. Prices were expected to drop further until a level was reached for new crop meal.

1954.

Phosphate Rock—Moderate sales were reported during the week. There was plenty around to fill consumer needs. Acidulating plants appeared to have large backlogs of superphosphate, and as a result were generally on the sidelines. Purchases for direct application were thought to have declined this year, as compared to last year.

Export business was slow, and some in the trade felt that exports of rock to Europe this year had been considerably below last year's levels. The key factor was said to be high transoceanic freight rates which sent European consumers into markets closer home.

Potash Salts — Some sources reported buying interest at a near-standstill last week following a spring which saw an excellent volume of sales. Prices on old contracts were said to be nominal for all intents and purposes, and the trade awaited with interest the issuance of new contracts.

It was indicated that new price schedules for potash fertilizers were running about thirty days late in some quarters due to bad spring weather, and that companies were trying to finish up old contracts before announcing new ones.

Producers expected to pick up a fair amount of weather-delayed business, but it was felt that the peak of seasonal demand had been reached and passed during the last weeks

Price Trends

Advanced
Blood, dried, New York, 25c. per unit-ton.

Reduced
Fishmeal, $10 per ton.
Fishscrap, $10 per ton.
Hoofmeal, 25c. per unit-ton.
Tankage, Chicago, 25c. per unit-ton.

Comparative Price Indexes
(100 =1949 average)

Last week	Prev. week	Last month	May 14, 1954
110.79	110.81	111.04	112.97

(For Current Prices see Page 9)

Los Angeles Market

Los Angeles—Although the majority of organic materials continued to show weakness, fairly good demand was maintained for fish meals with domestic supplies somewhat limited and spot material quoted $2.47½ per unit.

Pesticides

The Cooperative Economic Insect Report indicates armywork outbreaks in areas of Louisiana, Alabama, Georgia, Tennessee, and North and South Carolina, with economic infestations appearing in southern Missouri. Moth flights were reported in Kansas, Illinois, Delaware and other areas. Grasshoppers were reported hatching in Arkansas, Missouri, Kansas and New Mexico, with numbers appearing above normal for the time of year in Arkansas.

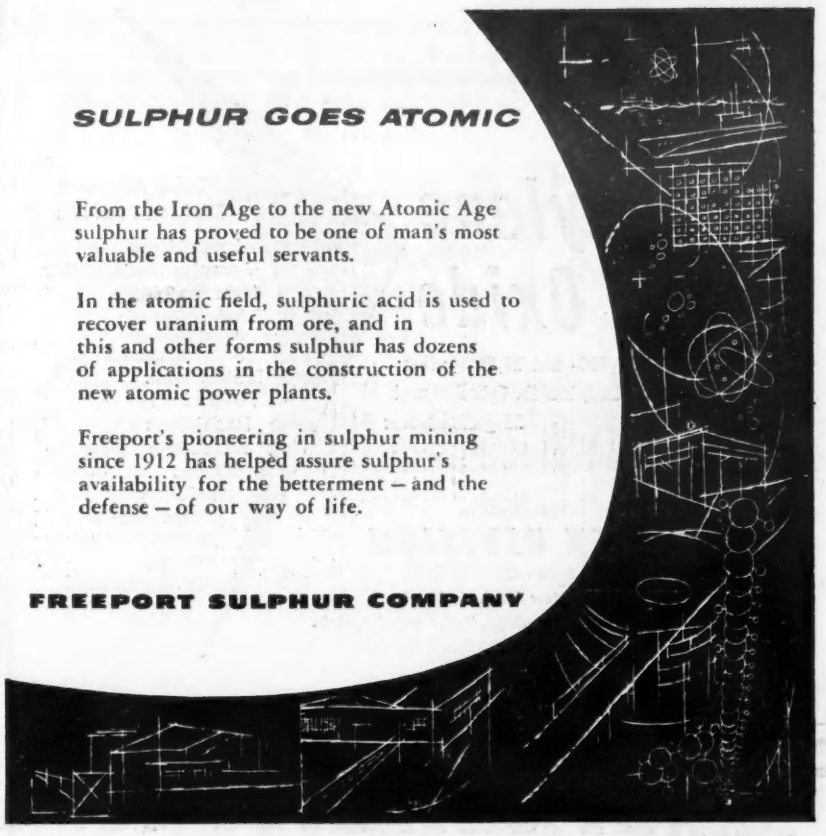
Heavy damage from the alfalfa weevil was reported in Maryland and Delaware, and continued spreading was reported in Virginia. The Colorado potato beetle was unusually abundant in Alabama, and Cutworms caused damage over wide areas of Alabama, Kentucky, Tennessee and Missouri. Although mortality among European corn borers in Minnesota showed an average of nineteen percent, surviving borers were reported in good condition, with sufficient numbers to cause heavy infestations.

The market for pesticides showed a complete turnabout during the week, and producers reported a heavy influx of business in many areas of the country. As a consequence, formerly unstable prices for some of the large volume items such as DDT were firmer. Demand was reported booming for 2,4-D, and herbicides in general, with prices firm on contract.

BHC—The easier trend in prices became more clearly defined last week as producers indicated that they were currently meeting lower prices initiated by a major producer more than a month ago. Quotations established at that time, and currently prevalent in the trade for technical BHC were 0.07c. per gamma unit, bags, carlots, f.o.b. works, and 0.085c. per gamma unit, less carlots, same basis. As yet there were no price changes in wet dust.

Sodium Arsenate—Moderately good call was apparent for this, as well as the other arsenates during the week, although it was pointed out that with the advent of a number of substitutes, consumption of these pesticides had diminished during the past few years. Prices were steady.

For Late Market Developments, See Page 4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Industrial Organic Chemicals

No price activity was reported for industrial organics last week. A good demand kept a number of materials moving at an excellent pace. A pickup in activity for rayon increased sales of glacial acetic acid and carbon disulfide.

In the solvent picture, ethanol, butanol and MEK were all moving well. Demand for ethyl alcohol was diversified. Butyl alcohol sold domestically for resins, plasticizers and lacquer solvent uses. Methyl ethyl ketone sold well for lacquer accounts and other uses.

Industrial solvent demand kept perchloroethylene active. Carbon tetrachloride moved at a moderate pace in the direction of solvent uses. But, demand from refrigerants and propellants picked up substantially.

Epichlorohydrin moved well for epoxy resin requirements. No significant changes were expected immediately in that market. Just about all that was made was sold readily. Refined glycerine demand was still quite strong. Glycerine stayed in relatively tight supply. The pressure had been greater, but, was not easing off much now. Resins provided a good call for this market and also for paraformaldehyde.

Plasticizers doing so well, kept isooctyl alcohol up to a good operating level. It was felt that the high production rates in the automobile industry had much to do with this octyl alcohol's success in recent months. That industry was also responsible for a substantial demand for lacquer materials and resins used in car finishes. It also boosted rubber industry activity, which kept many chemicals moving excellently. Butadiene sold well for synthetic rubber and di-isobutylene moved into additive outlets in that field.

Acetic Acid—Producers indicated that the market for glacial acid was quite good currently. Demand, notably in the southern textile mills, has picked up substantially in recent months. Some suppliers of acid were doing extra business because their geographical location permitted them to deliver while the L & N Railroad strike was in progress. The strike has been halted for arbitration and the former supply lines are being opened up.

The improvement in demand for rayon firmed up the price picture for glacial acetic acid. Where there had been frequent shading of schedules some time ago, there was very little of it outside of particularly weak textile areas now. Most sources felt encouraged by the brighter picture for acetic acid. In addition to textile requirements, acetate derived plastics have been taking a good volume of material.

Alcohol—Price schedules for ethanol were reported to be reasonably firm at current levels. Suppliers said that there was a good deal less shading in the market than there had been. It was generally felt that the structure would hold where it is.

Demand was good and was well diversified. Producers had ample capacity to take care of all consumer requirements. No significant changes in demand or price were anticipated.

Allyl Alcohol—There is not a large volume of business done in this market. However, there was a steady call from the phthalate plasticizer at its own level of use. Prices were steady without any sign of a change. Supplies were adequate to take care of consumption.

Butadiene—Sales were excellent. Current supplies were a bit short due to the continued pace for synthetic rubber. It was said that a strike in the automobile industry would have some reaction for rubber output and demand here. Prices were considered firm at 15c. per pound, although there were offerings reported at 14c. per pound. It was generally felt that the 15c. price would hold up.

Butyl Alcohol—Trade sources related that the market for normal butanol was very firm. Demand has perked up nicely and production was moving right out.

Most of the current interest was in domestic business for synthetic resins, plasticizers and lacquer solvent uses. There had been rather brisk export demand but it tapered off and has not substantially revived yet.

Carbon Disulfide—Producers reported that market conditions for this material were quite good. Demand from rayon was substantially improved. The volume of calls from cellophane have not slackened from their strong pace.

Price schedules remained firm at former listings. No revisions were expected. A strike that had been going on at one supplier's plant has been settled before any sign of tightening of market conditions. There was enough industry capacity to take care of consumption, it was said.

Carbon Tetrachloride — Trade sources said that activity in this market was better than it was last year. Demand has picked up significantly from propellants and refrigerants. There is also some steady solvent business, although this outlet for carbon tetrachloride was said to have dropped off in recent years.

There were adequate supplies to take care of present consumption requirements. No extreme shortages were anticipated, although some producers reported a little tightness in recent weeks. Production was resumed after a strike settlement at one producing facility the prior week. Thus, removing a potentiality for a real shortage. The strike wasn't long enough to hurt. Storage facilities were also adequate and distributed well enough to avert any disruption of the market.

Di-isobutylene — Price schedules remained firm at former levels. No revisions were immediately expected. Demand from synthetic rubber additives and for nonionic detergents was sufficient to keep whatever output that was available moving along quickly. The number of suppliers of this material is limited and has been narrowed down in recent years because several sources have found the market to be unprofitable and unable to support a substantial rise in price.

Epichlorohydrin—Production was moving out as fast as it was being made to fill orders. A continued good market for epoxy resins provided steady call for epichlorohydrin. New production was coming along soon, but so far there hasn't been much tangible result in the way of relief for this market. It was felt that the continued tightness in the glycerine market would delay some of the easing of pressure in this market because of chlorohydrin's use there.

Price schedules were firm and unchanged at 33c. per pound in tankcars, 35c. per pound in carlots, and 36c. per pound in l.c.l. quantities.

Ethyl Chloride—There was no significant change in the market. Most of the production moved steadily from month-to-month for tetraethyl lead output. Use of the gasoline additive could fluctuate with gasoline sales without effecting ethyl chloride. However, the lead market was felt to be stable currently.

Outside of this primary end-use for ethyl chloride, there was a little market activity for ethyl cellulose. But, most of the chloride used in this production is captive.

Ethylene Glycol—Good buying for antifreeze outlets has spurred this market. Industrial demand was only moderate. But, when canners came along and started buying for the new antifreeze season, the market picked up substantially.

Glycol producers expect to see another good antifreeze season. It was said that consumers are taking the material just about as fast as it is being offered. No drastic shortages were expected to develop because there is ample production capacity in the industry to handle a large volume.

Glycerine — Producers indicated that demand from all directions held up for refined material. Total requirements of consumers have been a little more than contract commitments with producers.

This market reports on industrial aliphatic organic chemicals. Reports on industrial aromatic organics may be found in the Coal Chemicals market, while reports on fine and rare organic chemicals appear in the Drugs, Fine Chemicals, Botanicals market.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 14, 1954
130.45	130.45	130.45	132.07

(For Current Prices see Page 9)

For Late Market Developments, See Page 4

Most suppliers have been keeping up their contract requirements without any difficulty. However, an occasional buyer seeking an extra amount found the market short.

It was said that the pressure was not quite as tight as it was when activity was building up to its peak. However, sales have been sustained and there was no indication of a letup. The price was firm at current levels and not expected to change.

There was no abundance of imported crudes either. Frequently some material of good size was purchased on bids in foreign markets and brought in here. However, the general supply picture showed a shortage of crudes. Prices remained intact at 21c. per pound for soaplye in tanks, and 23c. to 23½c. per pound in tanks for saponification grade.

Glycerine stocks made a slight gain in March of 322,000 pounds, which in some measure, could be explained by the fact that February was a short month. According to statistics from the Association of American Soap and Glycerine Producers, Inc., stocks at the end of March were 40,898,000 pounds, as against 40,576,000 pounds at the end of February. Stocks at the start of March were 40,576,000 pounds and were 43,195,000 pounds on February 1.

Production in March totaled 19,278,000 pounds, compared with 15,800,000 pounds in February and 20,120,000 pounds in March 1954. Cumulative output for the first quarter totaled 53,051,000 pounds, as against 57,376,000 pounds last year.

Iso-octyl Alcohol—Demand continued to hold up to a very good level. Producers reported that sales over the first four months were at an excellent pace. Activity in the market for plasticizers has been quite good and was expected to continue to hold up. Movement of vinyls was felt to have been helped by increased use in the automobile industry. The plasticizers are used in the vinyls, which in turn are going into car upholstery to a greater degree than previous years.

Isopropyl Alcohol—Suppliers indicated that activity in this market was well sustained. Demand was good from several directions. Producers were moving what they were producing without any real difficulty. No price revisions were expected.

Methyl Ethyl Ketone—The level of sales for this solvent was still very good. Producers reported continued excellent demand from lacquer outlets in the automobile industry and the furniture industry, and from vinyl coatings and printings.

Producers expected the general pace to hold up as long as overall business remains good. Prices were firm at former postings. There was ample output to take care of the demand.

Methylene Chloride—No changes in the market were noted. Demand continued to be steady. Prices held at recently established quotations, on the tankwagon level. Tankcar and carlot prices have been steady all along. Supplies were said to be ample for consumption needs.

Paraformaldehyde—Overall demand for para was holding to an even pace. The call for USP material was steady and firm. Consumer requirements of flake material were excellent. The smaller volume, powder remained at a steady pace.

Producers expected the call to hold up in line with general synthetic resin activity. Prices were firm and steady for all grades. Ample supplies were available to meet consumer requirements.

Perchloroethylene—Demand was still good. Suppliers moved stocks out well to take care of industrial solvent requirements. The market was said to be growing steadily. There was some limitation to how fast degreasing outlets grew due to the necessity of equipment change or modification. However, there are advantages in some instances to using perchloro because of its higher boiling point, it was said.

Shell Chemical Announces Changes in Marketing Dep't

Shell Chemical Corporation, New York, has announced five management changes in its marketing department. W. C. Lowrey, district manager at St. Louis, Mo., has been named manager of the Newark, N. J., district and has been succeeded in the midwest post by W. A. McCormick, formerly of the general sales manager's staff.

R. W. Campbell, formerly senior technical salesman for the Los Angeles district, has been named district manager in Los Angeles, replacing J. E. Toevs, who was recently appointed sales manager of the company's newly-created synthetic rubber sales division. G. E. Garland, district manager in New York, has been named to the sales manager's staff and D. P. Jones, of the sales manager's staff, has been made district manager in New York.

Glass Container Makers Choose Blunt President

Royden A. Blunt was elected president of the Glass Container Manufacturers Institute at the institute's eleventh annual meeting at the Greenbrier hotel, White Sulphur Springs, W. Va., last week.

Mr. Blunt is president and general manager of Buck Glass Company, Baltimore, Md. J. P. Levis, chairman of the board of directors of Owens-Illinois Glass Company, was elected first vice-president and F. W. McDonald, vice-president and general manager of Glass Containers, Inc., second vice-president.

Antibiotic Rules Changed

Several amendments to regulations relating to testing and certification of antibiotic preparations were announced last week by the Food and Drug Administration. The amendments concerned penicillin for use in poultry feeds for controlling outbreaks of coccidiosis in poultry flocks, benzathine-procaine-buffered crystalline penicillins for aqueous injection, and chlortetracycline capsules.

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"ELASTEX" DCHP Plasticizer
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"ELASTEX" 90-P Plasticizer (Didecyl Phthalate)
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CHEMICAL PROGRESS WEEK—MAY 16-21

Coal Chemicals

Demand levels for these chemicals held up where they had been in previous weeks. No drop in buying interest was seen or anticipated immediately. There were no sudden surges expected either. Prices have been as stable as demand. Some products were moving very well and some others have not shown much improvement.

Intermediates sold well in most instances. Stronger call from dyestuff intermediate end-uses kept most of them active. The products used in the rubber industry have been running at an excellent pace. Intermediates also went to plastics, resins, chemical end-uses and insecticides.

Demand for aromatics was strong. Enough material has been sold to industrial outlets to keep the market in an active position. Production increases that resulted from high steel operations left a lot of benzol, toluol and xylol to be offered. So far, the large consuming outlets for benzol in synthetic rubber and synthetic phenol have simplified the task of keeping output moving along. Demand for toluol from industry has been stronger than many thought it would be. But, total production capacity still looks large in the market.

Phthalic anhydride was still a bit short. The heavy phthalic call kept crude naphthalene production moving out to fill orders as fast as it was made. The markets for refined grades of naphthalene have been a little firmer.

Tar acid demand was still quite strong. Supplies of some grades of cresols and cresylic acid were short of total demand. Phenol moved fairly well, the market being much improved. Refined pyridine and quinoline were soft spots in the tar base picture. The picolines and vinyl pyridine were doing well.

A weekly record for steel operations was again scheduled for the industry during the week ending May 15, according to figures from the American Iron and Steel Institute. A rate of 96.7 percent of capacity was scheduled for that week. This was equivalent to 145.3 on the index scale, or 2,334,000 net tons of production during the week. In comparison the all-time record was set the previous week when 2,331,000 tons were produced. A month ago, 2,284,000 tons were produced, and the week correpsonding one year ago 1,690,000 tons were turned out.

Basic Products

Benzol—There were no significant changes in this market. Producers said that they have been moving steady amounts to regular consuming channels. Some of these outlets have held up right along and one or two other uses have shown improvement in the past month or more.

Prices were considered quite firm in their present position. There was ample material around for the demand. And, sustained high levels of steel production were increasing this supply.

So far offerings of imported benzol at prices below market levels have not resulted in any apparent weakness. Trade sources reported that brokers are offering material on the market at 32c. per gallon, delivered. There is an offer of 3,000,000 gallons at that price currently, it was said. An offer was also reported of iron curtain material at about 26c. per gallon. The material would have to be upgraded to bring it up to industry specifications, it was added.

In some instances, a source said, at least part of the imported benzol might have to be redistilled. This could be a vital factor in the transaction, it was added. The volume of material that was thought to be available from iron curtain countries is substantial. Estimates range in the neighborhood of 35,000,000 to 39,000,000 gallons per year for benzol, according to trade sources.

Just how much of this material is being offered, or will be offered in this market, is a significant question for the industry. There were many in the trade who felt that low-priced imported benzol would not break market prices here. This was attributed to the peculiar market situation. The price was recently reduced 4c. per gallon (Jan. 1) without price reductions of finished products right down the line. It was felt that a benzol reduction now, would result in a drop in prices for finished products which are being held in good quantities to keep up with the present demand.

It appears that these factors are a deterrent to a decline in prices for benzol. The sustained volume of business for benzol including fields of synthetic rubber, styrene plastics, synthetic phenol, insecticides and detergents, resulted in a demand strong enough to resist price weakness due to abundant supplies. In general, domestic producers expected market conditions to remain approximately the same through the end of the quarter.

Coaltar—Producers indicated that there was a little better supply of crude coaltar. Price schedules of resale material were unaltered. Demand for resale coaltar is limited, most of the activity for it is on a producer level, or in movement of other related products, it was said.

Cresylic Acid—The market for cresylic and tar acids was one area of the entire coaltar picture that showed exceptional strength. Producers were running all of the crudes that they could get through their equipment. But, supplies still fell short total demand.

Domestic producers were selling all of their coaltar cresylic acid for regular end-uses, including cresylic resins, tricresyl phosphate, wire enamels and engine cleaners. There was also some outlet for material in disinfectant and flotation uses. Suppliers of petroleum acid were also doing a good business in this market. One or two grades have been allocated by producers for several months because of heavy demands.

Importers stated that sales of ADF cresylic acid held up very well. Besides a normal interest in imported acid, suppliers reported an overflow of orders from the tight domestic supply. There is no shortage of ADF acid, although there is reported to be good activity in many of the same outlets for acid in Europe.

Naphthalene—Producers indicated that the demand for crude material was still strong. The volume of production is high due to higher coking activity, Still, producers could sell more naphthalene quickly.

The call for phthalic anhydride production was high, but, there was also some feeling that there was a little inventory buying in progress. Record production in the automobile industry has boosted end-use of phthalic in industrial finishes considerably. Consequently, many users felt that they had to hold larger stocks to cope with the greater volume of business. In recent weeks, the pressure does not appear to have gotten any heavier, but, there was no immediate indication of its lessening.

Imported crude naphthalene was still at 6¾c. per pound, nominal. Primary sources were reluctant to release any material under 7c. and domestic buyers firmly resisted a market price of 7c., although some material has been sold at that level in past weeks. Most importers indicated that very little business was actually being transacted currently. Both consumers and suppliers were felt to be waiting for an indication of a trend to determine future needs.

Phenol—Demand held to a fairly good pace, producers reported. Natural material has been moving quite well at a rate that was consistent with overall business volumes. Trade sources indicated that demand for synthetic phenol improved in re-

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 14, 1954
114.68	114.68	114.68	114.56

(For Current Prices see Page 9)

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending May 15, was as follows:—

Ammonia liquid, NH_3	lbs.	1,091,030
Ammonium sulfate	lbs.	39,432,934
Benzol	gals.	3,771,846
Coaltar	gals.	17,300,615
Creosote oil	gals.	966,341
Naphthalene, crude	lbs.	2,655,230
Pyridine, refined	lbs.	28,055
Toluol	gals.	740,900
Xylol	gals.	197,844

For Late Market Developments, See Page 4

cent weeks. Present activity was rated as being quite good.

A strike at one producing plant was ended early last week. Since the strike was not a long one, and there was ample output in the rest of the market, supplies were expected to remain adequate for demand.

Toluol—Production of this aromatic was more than adequate to take care of all of the industrial requirements of the market. Output of toluol increased as steel operations reached higher rates. In recent weeks steel production was setting new weekly records. Hence, supplies are becoming more abundant.

At the same time, defense outlets have not been taking as much toluol as they have in the past. Since total production has been expanded enough to handle both military and civilian buying, there was not enough industrial call now to move as much toluol as is being made. Nevertheless, the price structure remained standing and showed no indication of falling this month. Several producers indicated that they were in fairly good shape for the rest of May. June sales could not be judged yet because buying is not as far in advance as it used to be when supplies were shorter.

Intermediates

Nitrobenzene—Demand in this market was said to be fairly good. A little pick-up in activity has been noted in recent months and producers expected activity to hold up well. Prices were steady at previous listings. Adequate supplies were around for present demand requirements.

p-Phenyl Phenol—Producers related that demand for this substituted phenol has been very good. Synthetic resins derived from the material supplied a steady outlet. There was no shortage, and none was expected.

Phthalic Anhydride—Tight supplies prevailed for this intermediate. Demand for phthalic has been heavy from alkyd resins and phthalate plasticizers. The alkyds sold rapidly for industrial finishes on automobiles and home appliances, and also for the perked-up spring paint season. The plasticizers also moved well to automobiles in the synthetic fiber upholstery and other molded plastic parts. Generally good activity for plastics kept the phthalates moving in many directions.

Most sources expected the market to remain fairly tight for a while, although some easing of the pressure was foreseen within the next 60 days. A strike in the automobile industry could quickly remove the pressure here, it was said. Resin demand received by phthalic would be reduced rapidly, the source added. Some sources feel that an auto strike will not relieve the pressure immediately because there would be less naphthalene to take care of the phthalic needs that would go on.

Tar Bases—There were no significant changes in this picture. Refined 2-degree pyridine was still slow. Producers noted a little more activity for refined pyridine so far this year. But, total needs were less than former years. Quinoline was another tar base that was slow. Lost market outlets have cut activity in recent years. Trade sources indicated that quinoline and pyridine both need new channels of consumption to bolster sales.

b,g-Picoline was moving fairly well at a steady pace. There was a little interest in export for this tar base. a-Picoline has sold consistently well, moving to output of vinyl pyridine and eventually to the rubber industry. Some export interest has been noted for b-picoline. But, there seemed to be very little of the separated isomers available. The lutidines and collidines are not very large volume items presently. However, activity for them was relatively steady. No price changes were reported or expected soon in the entire tar base picture.

Pharmaceutical Association Installs New Term Officers

John B. Heinz, a practicing pharmacist from Salt Lake City, Utah, was installed president of the American Pharmaceutical Association at the annual meeting held recently in Miami Beach, Fla. Troy C. Daniels, dean of the college of pharmacy of the University of California, was installed as first vice-president and George C. Roberts, a practising pharmacist from Greenwood, Miss., took office as second vice-president.

Installed as members of the council for three years were:—Henry A. B. Dunning, chairman of the board of Hynson, Wescott & Dunning; Louis J. Fischl, a practicing pharmacist from Oakland, Calif., and Henry H. Gregg, a retail pharamist from Minneapolis, Minn.

Kinetic Dispersion Corp. Appoints H. M. Johnson

Kinetic Dispersion Corporation has announced the appointment of H. M. Johnson as its representative in the New York and New England areas. The company, manufacturer of the "Kady" mill, has also announced the establishment of a laboratory at Hillside, N. J. Mr. Johnson recently sold his interest in Naftone, Inc., (OPD, 4/4/55) and resigned as a director and officer of the company.

Cottonseed Oil Bids Asked

The Department of Agriculture last week invited offers for processing and packaging 8,420,000 pounds of cottonseed cooking oil from Commodity Credit Corporation stocks. The oil is for export to Pakistan. Offers will be received until 5 p.m., May 20.

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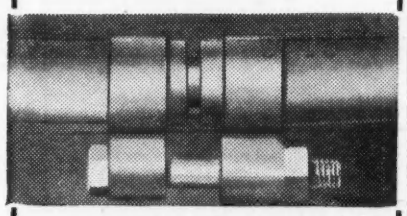

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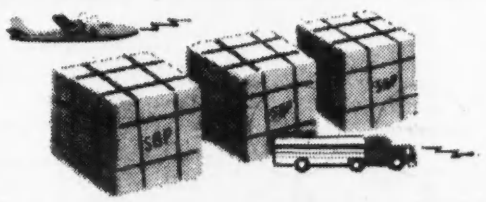

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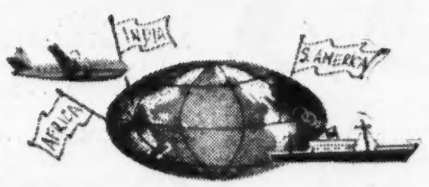
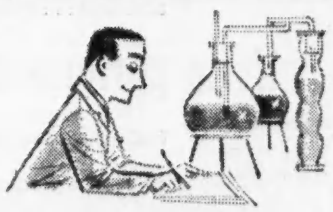


5 The chemical and clinical data we have on file in Washington enables us to use *a choice of raw material sources for* RESERPINE. We are not dependent on any one geographic area for our crude Rauwolfia.



6 Our research in the field of Rauwolfia alkaloids is continuing. One new alkaloid, Raunormine, has been announced and is ready for commercial production.

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Basic Products for the Pharmaceutical Industry

Drugs, Fine Chemicals, Botanicals

Silver salts were advanced last week, reflecting a rise in bullion prices. Silver cyanide was advanced 1⅛ cents while silver nitrate was up 1⅝ cents per ounce. Word was received at mid-week that a strike at a major producer's fine chemicals plant had been settled. Demand for seasonal items appeared to be moving well. Consumption of calcium cyclamate was expected to continue to rise this year, primarily as a result of the steady increase in consumer demand for non-caloric food items. In recent years calcium cyclamate has been adopted as the principal non-caloric sweetening agent used by manufacturers of carbonated soft drinks, consumption of which has grown appreciably.

Demand for caffeine was reported to be on the slow side. Some of the decline in consumer inquiry was seasonal but on the whole, the slackness in demand could be ascribed to a definite lessening in overall consumption. It was thought that consumer inventories were substantial in some cases, thus contributing to smaller requirements at this time. Theobromine was said to be moving at a strong tempo. Spot prices have advanced in recent weeks to compensate manufacturers for higher raw material costs. Offerings from Europe are decidedly fewer and are priced equally as high as domestic schedules, thus offering scanty incentive to would-be buyers here. The situation with regard to supply was expected to continue firm in the immediate future.

Demand for citric acid was running at excellent levels, according to producers. The boost in seasonal demand for this item has intensified usual industry requirements. Supplies were adequate and expected to continue in the immediate future while prices were firm. The approach of the peak season for frozen food processors was expected to boost demand for citric from that quarter appreciably since it is used in conjunction with ascorbic acid as an anti-oxidizing agent.

The tartrates were said to be moving at a slower rate than usual for this time of year. There was speculation that consumer inventories were large, having been built up as a result of heavy buying just prior to the price advance earlier this year. Supplies were ample and in light of the reduced demand, were expected to continue adequate in coming months. The antibiotics were reported to be moving more favorably as a result of the recent setup in their use in compounds formulated with vitamins.

Caffeine—Demand for caffeine, while seasonally smaller with regard to takings by the pharmaceutical trade, was generally satisfactory, it was said. Supplies were adequate to meet current needs and expected to continue while prices were firm. An appreciable amount of caffeine is used by soft drink manufacturers in the manufacture of cola-type drinks, it was noted.

Calcium Cyclamate—Demand for calcium cyclamate was reported to be running at seasonally strong levels with the largest user being the soft drink industry. Calcium cyclamate was purportedly superior to saccharin in certain applications, although higher priced. Consumption of this compound has steadily increased since it was introduced, its growth closely corresponding with the rise in consumer demand for non-caloric beverages, principally of carbonated soft drinks. The current market schedule on this chemical was $2.95 per pound in lots of 5,000 pounds or more with 2,500-5,000 pounds lots at $3.10 and 1,000-2,500 pounds lots, $3.25 per pound.

Gelatin—Total production of gelatin amounted to 4,919,328 pounds in March compared to 4,423,959 pounds in February and 4,383,582 pounds in March, 1954, according to a recent report issued by the Bureau of the Census.

Classified by type, production of edible gelatin aggregated 3,389,612 pounds in March compared to 3,017,199 pounds in February and 2,990,724 pounds in March last year. Production of technical grade gelatin aggregated 231,697 pounds in March compared to 294,180 pounds in February and 197,062 pounds in March, 1954. Production of pharmaceutical gelatin amounted to 381,445 pounds in March, 362,342 pounds in February and 229,893 pounds during March last year. Production of photo grade gelatin aggregated 916,574 pounds in March compared to 750,237 pounds in February and 965,903 pounds in March last year.

Price Trends

Advanced

Silver cyanide, 1⅛c. per oz.
Nitrate, 1⅝c. per oz.

Reduced

None

Comparative Price Indexes

(100 =1949 average)

Last week	Prev. week	Last month	May 14, 1954
67.18	67.18	67.18	71.90

(For Current Prices see Page 9)

Inositol—Demand for this polyol was reportedly steady while supplies were ample to cover current needs. It has been reported that inositol acts as a synergist when used with choline. With interest in geriatric medication, particularly in the treatment of atherosclerosis steadily increasing, there has been additional interest in inositol for this usage.

Mercurials—This market continued quiet last week in face of routine consumer inquiry, in the pharmaceutical trade. However, there has been a spurt in export demand for yellow mercury oxide for use in the tropics. It was understood that a substantial quantity of this compound goes into the formulation of marine paints which are applied to ships' bottoms in Southern waters. In the Northern latitudes, copper pigments are principally used for this purpose.

Despite falling quicksilver prices, there has been no reaction to date by mercurial manufacturers who are accustomed to erraticalness in quicksilver quotations. Prices were firm and unchanged.

Molasses—Feed molasses prices weakened slightly in the Gulf region during the week ended May 10, 1955. One-half-cent declines occurred at Corpus Christi and Beaumont, Texas—from 11½c. to 11c. per gallon. Demand continued moderate at those points. New Orleans blackstrap price remained at 10½c. (mostly) per gallon as market conditions were unsettled at that terminal. A seasonal drop in demand was in evidence in the Midwest and Southwest. East coast demand for blackstrap continued moderate with the Albany price at 13c. per gallon. West coast demand was good at a price of $20 per ton.

Production of 1955 Cuban blackstrap amounted to 187,500,000 gallons as of April 30, 1955, according to trade sources, which compares with a production of 215,900,000 gallons during the same period of 1954. The yield of blackstrap per short ton of raw sugar from the current crop was 38.9 gallons as of the above date—4.2 gallons less than the comparable yield a year ago. Hightest molasses production in Cuba totaled 89,200,000 gallons as of April 30, 1955, indicating a possible final high-test crop of about 170 to 190,000,000 gallons.

Silver Salts—The silver salts were advanced last week reflecting a hike in bullion quotations. Silver salt quotations have closely followed the erratic movements in silver bullion prices with this latest change being about the fourth in the past three months.

Silver nitrate was advanced 1⅝ c. per ounce while silver cyanide was upped 1⅛c. The new schedule on silver nitrate was as follows:—20,000 ounce lots, 56⅛c.; 2,500 ounce lots, 56⅜c.; 1,000 ounce lots, 58⅝c.; 500 ounce lots, 59⅛c.; and single 250 ounce bottles at 59⅝c. Silver cyanide was advanced 1⅛c. with the following new schedule:—2,500 ounce lots, 79¾c.; 1,000 ounce lots, 80c.; 500 ounce lots, 80¼c., and 100 ounce lots, 80½c. per ounce.

Tartrates—Demand for the tartrates was reportedly slow to fair for this time of year. Traditionally, demand for tartaric acid is boosted during the warm weather months as a result of its accelerated use, particularly in soft drink manufacture.

A major factor behind the current slow demand was said to be the likelihood that consumer inventories were higher than usual due to the heavy buying which took place before the price hike in tartrates earlier this year. Prices were unchanged and supplies expected to continue adequate in coming months.

Totaquine—It was recently announced that the current government stockpile of totaquine was to be disposed of later this year. Currently 7,818,272 ounces of tota-

For Late Market Developments, See Page 4

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quine were reported held in the national stockpile. The method of disposal will be to offer the totaquine for general sale. It was stated that totaquine was now considered obsolescent for use in time of war because of the development of new and better anti-malarial drugs.

Although the principal component in totaquine is quinine, the quantity contained in the amount involved was not expected to disrupt the current quinine market in any appreciable way. It was anticipated that all or almost all sales will be for export, it was said.

Botanicals

Some new crop material has begun to appear in the spot market in small quantities. A preliminary report from the primary market indicates that prices offered to collectors have generally advanced on the following group of items: aletris root, black haw root bark, witch hazel leaves, yarrow herb and wintergreen leaves and herb.

Items for which dealers in the primary market have lowered prices since the start of the new crop year include blackberry root bark, pink root, Jersey tea root bark, southern prickly ash bark, shonny haw tree bark, wild plum bark, yellow dock root and wahoo root bark.

The labor situation was expected to continue adequate this year especially in the coal fields area. The mines have been operating spasmodically and the number of laborers seeking to supplement their income through botanicals collection was substantial. Excessively rainy weather in the Northwest has resulted in no offerings of new crop senega root to date. The collection of cascara sagrada bark was estimated to be at least a month behind. Spot supplies of cascara were expected to prove ample until new crop comes in but senega root stocks, of which there are virtually none, were not expected to improve until the first of the new crop becomes available.

Guar Gum—It was understood that the importance of this gum has increased appreciably in recent years and that overall annual consumption, while accelerating, is just under 7,000,000 pounds per year. It is currently available in both technical and food (wholly edible grades). Although experimental quantities of this gum were made in 1940, lowered costs in recent years resulting from greatly improved extraction methods have been most influential in boosting consumption. Use of guar gum has reportedly spread from processors of foodstuffs, pharmaceuticals, cosmetics and the like, to the process industries. Principal quantity buyers at present were paper manufacturers.

The current market price schedule for guar gum was as follows:—technical grade, carloads, 32c. per pound; truckloads, 33c.; 3 ton lots, 34c. with less than 3 tons, at 36c. Food grade (wholly edible) ranged from 40c. to 50c. per pound in less than carload lots, 250 pound fiber drum packing.

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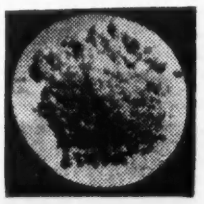
Distilled Concentrate of Mixed Tocopherols originates from domestic vegetable oils. Molecular distillation and associated processing concentrate the natural tocopherols and increase the proportion of *d*-α-tocopherols. It is a clear red oil with a mild taste and odor—an excellent way to provide the vitamin E in multivitamin capsules.

Distilled Concentrate of d-α-Tocopheryl Acetate is a clear yellow oil. It has unusually high stability to air, even in the presence of most pharmaceutical materials. Taste and odor are mild. This is what we wholeheartedly recommend for tablets, powders, gelatin capsules, and drop preparations.

Crystallized d-α-Tocopheryl Acetate is a light yellow, viscous oil at room temperature. It has the highest biological potency of any commercial vitamin E bulk material we know of, which makes this product readily adaptable to solubilized preparations, tablets, and capsules where a maximum dosage in a minimum of oil is what you want.



Crystalline d-α-Tocopheryl Acid Succinate is a nearly tasteless and odorless white powder. The only crystalline form of vitamin E commercially available, it melts at about 76-77 C and is stable to atmospheric oxidation. Succinate is very soluble in chloroform, slightly soluble in alcohol, ether, naphtha, acetone, and vegetable oils. It's insoluble in water, but forms a sodium salt which is soluble to the extent of about 0.2%. This saturated solution is slightly alkaline.

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Current Prices

—Continued from page 35

X

Xylene (see Xylol).			
Xylenol, cryst., 58°-60°C., m.p., dms., l.c.l., works	lb.	.40	—
56°-58°C., dms., l.c.l., works, frt. equald	lb.	.30	—
45°-47°C., dms., c.l., same basis	lb.	.212	—
l.c.l., same basis	lb.	.215	—
tanks, same basis	lb.	.199	—
fractions, over 7°C. b.r., except metal, dms., c.l., same basis	gal.	.90	—
l.c.l., same basis	gal.	.99	—
tanks, same basis	gal.	.85	—
meta fraction, over 7°C., b.r., dms., c.l., same basis	gal.	1.01	—
l.c.l., same basis	gal.	1.04	—
tanks, same basis	gal.	.90	—
Xylidines, mixed, dms., c.l., truckload, works	lb.	.39	—
l.c.l., same basis	lb.	.40	—
tanks, same basis	lb.	.38	—
Xylol, coaltar, indust., tanks, works, Bethlehem, Pa	gal.	.34	—
Birmingham district	gal.	.32	—
Chicago district	gal.	.35	—
Cleveland district	gal.	.34½	—
Geneva, Utah	gal.	.27	—
Johnstown, Pa.	gal.	.33	—
Lackawanna, N. Y.	gal.	.35	—
Lone Star, Tex.	gal.	.33	—
Lorain, Ohio	gal.	.33	—
Middletown, Ohio	gal.	.34	—
Minnequa, Colo	gal.	.34	—
Philadelphia district	gal.	.34	—
Pittsburgh district	gal.	.32	—
Sparrows Point, Md.	gal.	.34	—
Terre Haute, Ind.	gal.	.35	—
Youngstown, O.	gal.	.32½	—
petroleum, indust., tanks, works:— Bayonne, N. J.	gal.	.34	—
Baytown, Tex.	gal.	.33	—
Chicago, Ill.	gal.	.35	—
Houston, Tex.	gal.	.35	—
Philadelphia, Pa.	gal.	.34	—
Providence R. I.	gal.	.35	—
Wood River, Ill.	gal.	.35	—

Y

Yara yara, cns	lb.	2.15	2.65
Yeast, brewer's, dry, USP, 50 Int'l B units per gram, 100-lb. dms	lb.	.47	—
90 Int'l B units per gram, 100-lb dms	lb.	.52	—
200 Int'l B units per gram, 100-lb. dms	lb.	.56	—
300 Int'l B units per gram, 100-lb dms	lb.	.60	—
Yellow, barium chromate, CP, bbls., dlvd. N. l.c.l., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island St. Louis St. Paul	lb.	.35	—
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below.			
Benzidine AAA, bbls., dlvd.	lb.	2.00	—
AAOT, bbls	lb.	2.25	—
Lightfast, bbls.	lb.	3.15	—
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies	lb.	2.85	—
lithopone, all shades, bbls., frt. alld., E of Rockies	lb.	1.15	—
Cadmium yellows, Los Angeles and San Francisco, ex whse., 1c. per lb. higher.			
Chrome, CP, bbls., dlvd. N. Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island	lb.	.32	—
Dlvd. Ala., Fla., Ga., La. (Shreveport 1½c. higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.			
Hansa 10 G, bbls., same basis as yellow, chrome	lb.	2.15	—
G pigment, bbls	lb.	1.91	—
Iron oxide, natural, French type, bgs., c.l., works	lb.	.05¼	—
Peruvian type, bgs., l.c.l.	lb.	.038	—
pure, bgs., c.l., works	lb.	.11	—
l.c.l., works	lb.	.11¼	—
Mercury oxide, bbls., 1,000-lb. lots	lb.	5.58	—
smaller lots	lb.	5.60	—
Ocher (see Yellow, iron oxide, natural).			
Zinc (chromate), bbls., dlvd.	lb.	.26	—
basic, dlvd	lb.	.31	—
Yerba santa leaves, bls	lb.	.40	.42
Yohimbine hydrochloride, bots, tin.	oz.	4.50	—

Z

Zein, bgs., 36,000-lb. lots or more	lb.	.38	—
1,000 to 36,000-lb. lots, works	lb.	.40	—
smaller lots, works	lb.	.43	—
Zinc acetate, NF VIII, dms.	lb.	.53	—
tech., dms., works	lb.	.27	—
Borate, bgs., c.l., dlvd. E.	lb.	.192	—
l.c.l. dlvd E	lb.	.202	—
Chloride, NF, gran., dms.	lb.	.42	—
precipitated powd dms	lb.	.26	—
soln., 50%, dms., c.l., works, 100 lbs.		5.50	—
l.c.l., works	100 lbs.	6.10	—
tanks, works	100 lbs.	4.85	—
tech., fused, dms., c.l., works, 100 lbs.		10.10	—
l.c.l., works, dms.	100 lbs.	10.60	—
gran., fib. dms., c.l., works 100 lbs.		10.85	—
l.c.l., works	100 lbs.	11.35	—
Chromate (see Yellow, zinc).			
Cyanide kgs., 1,000-lb. lots or more, works	lb.	.523	—
smaller lots, works	lb.	.543	—

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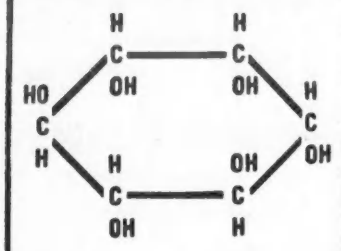

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Inositol is known to exhibit a synergistic action with other lipotropic agents. It is an accessory growth factor for animals and microorganisms.

Literature available upon request.

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Fluoride bbls., works lb. .49 - .50
Hydrosulfiite, dms., c.l., frt. alld, lb. .21½- —
l.c.l., frt. alld lb. .22 - .37½
Metal, prime western slabs, E. St. Louis lb. .12 - —
Naphthenate, liq., 8% Zn., dms., frt. alld lb. .24½- —
10% Zn dms. frt alld lb. .30 - —
Oxide, pigment, American process, lead-free, bgs., c.l., dlvd lb. .13½- —
c.l. dlvd lb. .14½- —
leaded 35%, bgs., c.l., milled, bgs., c.l., works lb. .04½- —
l.c.l., dlvd lb. .15¼- —
50%, bgs., c.l., dlvd lb. .14⅝- —
l.c.l. dlvd lb. .15⅜- —
French process, coml., green seal, bgs., c.l., dlvd lb. .15¼- —
l.c.l., dlvd lb. .16¼- —
red seal, bgs., c.l., dlvd lb .14⅜- —
l.c.l. dlvd lb. .15⅜- —
white seal, bgs., c.l., dlvd, lb. .15¾- —
USP, ctns., c.l., dlvd lb. .16¾- —
l.c.l., dlvd lb. .17¾- —
Zinc oxide Pac. coast prices 1c higher.
Phenolsulfonate, NF, gran., dms, lb. .39 - —
powd., dms lb. .42 - .49
Resinate, precip., 7.2-7.6% Zn, dms., frt alld lb. .29 - —
Silicofluoride, bbls., works lb. .12 - .13
Stearate, tech., USP, ctns., c.l. lb. .37 - —
l.c.l., lb. .38 - .42
Sulfate cryst., 22% Zn, bgs., c.l., works, frt. alld 100 lbs. 8.05 - —
l.c.l., same basis 100 lbs. 8.60 - —
flake, 25½%, Zn, bgs., c.l., works, 100 lbs. 5.85 - 7.40
l.c.l., works 100 lbs. 6.85 - 7.90
powd., monohydrate, 36% Zn, bgs., c.l., dlvd. E 100 lbs 8.25 - —
l.c.l., dlvd. E 100 lbs. 9.25 - —
Zinc sulfate in bbls. 40c. higher.
USP gran dms lb 26
Sulfide, pure, bgs., c.l., dlvd lb. .2530- —
Undecylenate, dms. lb. 2.25 - 2.50
Yellow (see Yellow, zinc)
Zinc-ammonium chloride, bgs., c.l., works 100 lbs. 9.65 - —
bbls., c.l., works 100 lbs.10.25 - —
l.c.l., bbls., works 100 lbs.10.75 - —
Zinc-formaldehyde sulfoxylate, basic, dms., c.l lb. .25½- —
l.c.l. lb. .26 - .41½
normal, dms., l.c.l., works lb. .52 - —
Zircon (G), gran., bgs., c.l., works, lb. .03½- —
5 tons to c.l., works lb. .03⅝- —
1 ton to 9,999-lb lots, works, lb. .04 - —
smaller lots, works lb. .06½- —
milled, bgs., c.l., works lb. .04⅛- —
5 tons to c.l., works lb. .04⅜- —
1 ton to 9,999-lb lots, works, lb. .04⅝- —
500 to 1,999-lb lots, works, lb. .07½- —
Zircon (G) in barrels, 1c higher.
Zirconium acetate, 13% soln. ZrO_2, c.l., 30,000 lbs. minimum, works lb. 23 - —
Hydride, cns., works lb. 7.00 - 8.45
Nitrate, dms., ex whse lb. 4.50 - 7.00
Oxide, 92½%-99%, white, grd., bbls., or bgs., works lb. 1.50 - —
lump, electric-fused, bgs., c.l., works lb. .44 - —
5-ton lots, works lb. .44½- —
1 ton to 9,999-lb. lots, lbs., works lb. .45 - —
CP, white, grd., bbls., or bgs., works lb. 1.50 - —
lump, electric fused, bags, 500 to 1,999-lb. lots, works lb. .45½- —
smaller lots, works, lb. .48 - —
milled, electric-fused, bgs., c.l., works lb. .59 - —
5-ton lots, works lb. .59½- —
1 ton to 9,999-lb. lots, works lb. .60 - —
500 to 1,999-lb. lots, works lb. .60½- —
smaller lots, works, lb. .63 - —
Oxychloride, cryst., ctns., 5-ton lots, works lb. .35½- —

Harshaw Chemical Company Moves New York Branch Office

On May 20 the New York branch office of Harshaw Chemical Company will move to Hastings-on-Hudson, N. Y. The office will be located in facilities now under construction at the plant site of the company's recently acquired subsidiary, Zinsser & Company.

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AMINO ACID—1 ck, International Selling Corp, Havre

AMMONIUM CHLORIDE—197 bgs, Chemical Manufacturing Co, Liverpool

ANILINE DYES—2 cans, Hensel Bruckmann & Lorbacher, Bremen
56 dms, C A Haynes, Hamburg
30 dms, Hensel Bruckmann & Lorbacher, Hamburg
30 cans, C A Haynes, Hamburg
12 dms, Heemsoth Kerner, Liverpool
19 dms, Carbic Color & Chemical Co, Havre
12 dms, Geigy Chemical Corp, Havre
5 dms, C A Haynes, Bremen
10 cks, C A Haynes, Hamburg
4 dms, Hensel Bruckmann & Lorbacher, Bremen
16 dms, Hensel Bruckmann & Lorbacher, Rotterdam
2 cans, Hensel Bruckmann & Lorbacher, Rotterdam
4 dms, Corman & Anderson Corp, Rotterdam
60 dms, Sandoz Chemical Works, Havre

ANISE SEED—25 bgs, E A Johnson & Co, Vera Cruz
84 bgs, Alicante

ANNATTO SEED—622 bgs, Dorf International Ltd, Kingston
108 bgs, London

ANTIMONY—10 cs, Watson Geach & Co, Liverpool
CONCENTRATES — 4,740 bgs, Watson Geach, Lourenco Marques

ARABIC GUM—300 bgs, Stein, Hall & Co, Port Sudan
400 bgs, T M Duche & Sons, Port Sudan
150 bgs, Irving Trust Co, Port Sudan
200 bgs, Brown Bros, Port Sudan
250 bgs, Bank of N Y, Port Sudan
100 bgs, Manufacturers Trust Co, Port Sudan
738 bgs, National City Bank, Port Sudan
300 bgs, Orbis Products Corp, Port Sudan
400 bgs, Morningstar Nicol, Port Sudan
630 bgs, Port Sudan

ARGOLS—1,386 bgs, Tartaric Raw Materials, Algiers

ARROW ROOT—1,520 bgs, Morningstar Nicol, St Vincent

ARSENIC, METALLIC — 69 dms, National City Bank, Gothenburg
69 dms, Danwill Co, Gothenburg
WHITE—52 bbls, American Smelting & Refining Co, Tampico

ASBESTOS FIBER—2,200 bgs, Johns Manville Corp, Capetown
3,670 bgs, Johns Manville Corp, Beira
35 bgs, Keasby & Mattison, London

BABASSU KERNELS—3,000 bgs, Spencer Kellogg, Sao Luiz

BAY OIL—4 dms, Polaks Frutal Works, Dominica
1 dm, Felton Chemical Co, Dominica
1 dm, Citrus & Allied Essential Oil Co, Dominica
1 dm, D W Hutchinson & Co, Dominica

BEESWAX—30 bgs, Reaud Geck Corp, Puerto Barrios
93 bgs, National City Bank, Tampico
68 bgs, Curacao Trading Co, Ciudad Trujillo
42 bgs, Machado & Co, Ciudad Trujillo
30 bgs, Schutte & Focke, Ciudad Trujillo
156 bgs, Smith & Nicols, Porto Alegre
535 bgs, Grace National Bank, Porto Alegre
49 bgs, H H Pike & Co, Tampico
16 bgs, Machado & Co, Puerto Plata
65 bgs, Marcel Calvet, Ciudad Trujillo
48 bgs, Chase Manhattan Bank, Havana
71 bgs, Bank of London & S A, Lisbon
222 bgs, Mercantile Metal & Ore Corp, Porto Alegre
34 bgs, Havana
29 bgs, Tampico

BOIS DE ROSE OIL—10 dms, Lo Curto & Funk, Belem-Para

BONE CHAR—505 bgs, Lisbon

BUCHU LEAVES—30 bls, Capetown

CADMIUM—110 cs, Antwerp

CALCIUM BROMIDE—15 dms, Rhodia Inc, London

CANDELILLA WAX—1,026 bgs, Tampico

CARDAMOM—22 cs, Wm E Martin, Colombo
20 cs, Kellys America Ltd, Colombo
11 cs, S B Penick & Co, Colombo
SEED—24 cs, Wm E Martin, Puerto Barrios
12 cs, London

CARNAUBA WAX—111 bgs, Marklin Chemical Corp, Rio de Janeiro
1,111 bgs, Gillespie & Co, Cabedello
168 bgs, Strahl & Pitsch, Fortaleza
111 bgs, J H Schroder, Fortaleza
1,111 bgs, N Y Trust Co, Cabedello
280 bgs, Cornelius Products Co, Natal
111 bgs, M Argueso & Co, Areia Branca
166 bgs, J H Schroder, Areia Branca
500 bgs, National City Bank, Tutoia
63 bgs, Frank B Ross, Tutoia
664 bgs, Balfour Guthrie, Tutoia
25 bgs, Wm Diehl & Co, Tutoia
112 bgs, Strohmeyer & Arpe, Fortaleza
33 bgs, Dura Commodities, Fortaleza
222 bgs, Cornelius Products Co, Fortaleza
245 bgs, Frank B Ross, Fortaleza
112 bgs, Hans Tobeason, Fortaleza
75 bgs, Areia Branca

CASEIN—1,100 bgs, Tupman Thurlow, Buenos Aires
500 bgs, Borden Co, Buenos Aires
500 bgs, Eugenio Lang, Buenos Aires
500 bgs, F H Paul & Stein Bros, Oslo
1,000 bgs, Crawford Kish & Co, Buenos Aires

CASTOR BEANS—1,936 bgs, Spencer Kellogg, Port de Paix
8,534 bgs, D Levin, Salvador
3,387 bgs, Baker Castor Oil Co, Salvador
550 bgs, Baker Castor Oil Co, Area Branca
OIL—203 tons, Spencer Kellogg, Rotterdam
323 tons, Baker Castor Oil Co, Bombay
300 tons, Wallace Tiernan Inc, Fortaleza

CINNAMON BARK OIL—1 cs, Ungerer & Co, Colombo
QUILLS—50 bls, Kellys America Ltd, Colombo

CITRONELLA OIL—25 dms, Lo Curto & Funk, Puerto Barrios
10 dms, Givaudan Corp, Puerto Barrios
16 dms, Garrigues Stewart & Davies, Keelung
OIL—50 dms, Melanol Corp, Keelung
6 dms, C T Wilson Co, Coatzacoalcos

CLOVE—80 bls, French American Banking Corp, Zanzibar
200 bls, Corn Exchange Bank, Zanzibar
80 bgs, Hismoco American Co, Zanzibar
OIL—23 dms, Zanzibar

COALTAR DYES—7 dms, Hensel Bruckmann & Lorbacher, Rotterdam
40 dms, General Aniline & Film Corp, Rotterdam
4 dms, Hensel Bruckmann & Lorbacher, Hamburg

COCA LEAVES—118 bls, Merck & Co, Salaverry

COCONUT OIL—879 tons, Lu Do & Lu Ym Corp, Cebu
450 tons, E F Drew & Co, Cebu
500 tons, Manila

COD OIL—100 dms, Scandinavian Oil Co, Oslo

COPAIBA BALSAM—10 dms, Wessel Duval & Co, Manaus
9 dms, Kline & Co, Manaus
6 dms, Chase National Bank, Manaus
15 dms, Lautier Fils Inc, Belem-Para

COPAL GUM—217 bkts, S Winterbourne & Co, Macassar
136 bkts, Borneo Sumatra Trading Co, Macassar
34 bgs, S Winterbourne & Co, Macassar
236 bgs, O G Innes Corp, Manila
204 bgs, Wm H Scheel, Hong Kong
69 bkts, Internatio Rotterdam, Macassar

CRESYLIC ACID—264 dms, H A Gogarty, Liverpool
30 tons, H A Gogarty, London

CUBE ROOT—323 bls, H A Astlett & Co, Iquitos
1,802 bls, Hecht Levis & Kahn, Iquitos

CUTTLEFISH BONE—47 cs, Wagner Bros, Portlmao

DAMAR GUM—89 cs, S Winterbourne & Co, Singapore
10 bgs, O G Innes Corp, London
70 bgs, O G Innes Corp, Singapore

DEXTRIN—100 bgs, Guaranty Trust Co, Rotterdam ?

DILL SEED—200 bgs, Meer Corp, Bombay

DOGWOOD BARK—20 bls, Lydia E Pinkham Co, Kingston
207 bls, Lydia E Pinkham Co, Kingston

EARTH COLORS—[illegible] dms, Baker Irons & Dockstader, Bremen
5 bbls, Baker Irons & Dockstader, Bremen
900 bgs, Natcone Inc, Bremen
300 bgs, American Cyanamid Co, Bremen
200 bgs, Whittaker Clark & Daniels, Bremen

FENNEL SEED—1,290 bgs, Louis Furth, London

FERRIC CHLORIDE—50 dms, Rotterdam

FISHLIVER OIL—3 dms, Interocean Chemical & Minerals Corp, Yokohama
5 dms, Arisca Oil Products Co, Yokohama
5 dms, J D Smith Interocean, Yokohama

FLAKE ACID—331 kgs, Chipman Chemical Co, Liverpool

FUEL OIL—136,935 bbls, Metropolitan Petroleum Corp, Punta Cardon
133,514 bbls, Metropolitan Petroleum Corp, Curacao
114,712 bbls, Esso Export Corp, Caripito
101,000 bbls, Esso Export Corp, Aruba
312,164 bbls, Esso Standard Oil Co, Las Piedras
221,000 bbls, Esso Standard Oil Co, Aruba
213,719 bbls, Paragon Oil Co, Tampico

GALL, OAK—3 trcs, International Packers Ltd, Rio Grande

GELATIN—100 bbls, Coignet Chemical Co, Antwerp
100 bgs, T M Duche & Sons, Rotterdam
200 bgs, T M Duche & Sons, Harve
200 bgs, G Lippelgoes, Liverpool

GERANIUM OIL—33 dms, Djibouti

GHATTI GUM—68 bgs, F L Kraemer, Bombay
57 bgs, Bombay

GINGER—100 bgs, P H Wechsler & Co, Kingston
72 bgs, Hoffman Beverage Co, Kingston
56 bgs, Van Loan & Co, Kingston
111 bgs, Karl H Landes & E Balint, Kingston
200 bgs, Van Norden & Co, Liverpool
128 bgs, Mincing Trading Corp, Lagos
206 bgs, Van Norden & Co, London
211 bgs, S B Penick & Co, Kingston

GLUE—25 bbls, Lloyd Associates Ltd, Bremen
10 bgs, Paisley Products Inc, Liverpool
STOCK—376 bls, A M Goldstein, Barranquilla

GLYCERINE—56 dms, Balfour Guthrie, Kingston

GRAPHITE—1,000 bgs, Asbury Graphite Mills, Hong Kong
620 bgs, Joseph Dixon Crucible Co, Hamburg
250 bgs, Asbury Graphite Mills, Colombo
514 bgs, C Pettinos, Colombo

GYPSUM—10,382 tons, U S Gypsum Co, Hantsport
2,600 tons, Newark Plasier Co, Walton

HENNA LEAVES—53 bls, Irving Trust Co, Port Sudan

HO OIL—3 dms, Lo Curto & Funk, Keelung
3 dms, United Global Corp, Keelung

HOOF AND HORNMEAL—616 bgs, Tupman Thurlow, Rio Grande

INDIAN GUMS—134 bgs, Colony Import & Export Corp, Bombay
117 bgs, Jacques Wolf & Co, Bombay

INDIGO—17 cks, Hensel Bruckmann & Lorbacher, Hamburg

INSECTICIDE—3 dms, Geigy Chemical Corp, Harve

IODINE, CRUDE—160 kgs, North Atlantic Fertilizer & Chemical Co, Yokohama

IPECAC ROOT—13 bgs, Wessel Duval & Co, Cristobal
5 bgs, Curacao Trading Co, Port Limon

IRON BLUE—65 dms, Van Oppen & Co, Liverpool
OXIDE—448 bgs, Landers Segal Color Co, Liverpool

KARAYA GUM—61 bgs, Tragacanth Importing Corp, Bombay
123 bgs, Morningstar Nicol, Bombay
123 bgs, Thurston & Braidich, Bombay
122 bgs, Stein Hall & Co, Bombay
59 bgs, Colony Import & Export Corp, Bombay
60 bgs, Wm M Allison & Co, London
93 bgs, Meer Corp, London
62 bgs, P A Dunkel, London
62 bgs, Colony Import & Export Corp, London

KOLA NUT—16 bgs, D Steengrafe & Co, St Lucia
70 bgs, John Holt & Co, Accra

LANTHANUM OXIDE—3 dms, Bausch & Lomb Optical Co, Bremen

LEAD NITRATE—66 cks, Berkshire Chemicals Inc, London

LEMON OIL 3 dms, Vera Cruz

LEMONGRASS OIL—1 dm, Dodge & Olcott, La Libertad

LIVERMEAL—500 bgs, National City Bank, Timaru

LOCUST BEAN GUM—380 bgs, Bankers Trust Co, Lisbon

LOGWOOD EXTRACT—89 cks, American Dyewood Co, Kingston

MACE—20 cs, J W Phyfe & Co, Rotterdam
28 cs, Borneo Sumatra Trading Co, Macassar
14 cs, Internatio Rotterdam, Macassar
30 cs, Macassar

MAGNESIUM SILICIATE—50 cks, Aceto Chemical Co, London
SULFATE—20 bgs, Lo Curto & Funk, Bremen
TRISILICATE—95 cs, Reheis & Co, Liverpool

MANGANESE HYPOPHOSPHITE—1 cs, Gallard Schlesinger, London

MANGROVE EXTRACT—2,000 bgs, Saxe Cutch Corp, Singapore

MERCURY—100 flks, Frank Samuel & Co, Tampico
50 flks, L H Keller & Co, Tampico

MICRANTHUM HAYATA OIL—2 dms, Fritzsche Bros, Keelung

MOLASSES—3,594 tons, Instituto Cubano De Est Del Azugar, Antilla
4,830 tons, Instituto Cubano De Est Del Azugar, Nuevita
1,920 tons, Instituto Cubano De Est Del Azugar, Caibarien

MONTAN WAX—400 bgs, Wax & Rosin Products, Bremen
20 bgs, American Firestone Corp, Hamburg

MUSTARD OIL—10 cs, Lo Curto & Funk, Hamburg

MYRISTYL ALCOHOL—2 dms, Wilkinson Inc, Antwerp

NAPHTHALENE—1,636 bgs, Chemtar Inc, Gdynia

NAPHTHOL—3 dms, Hensel Bruckmann & Lorbacher, Rotterdam

b-NAPHTHOL—340 bgs, General Aniline & Film Corp, Rotterdam

NICKEL CHLORIDE—10 cks, Beekman Shipping Co, London
SULFATE—100 bgs, First National Boston, Hamburg
60 cks, J H Miller, Bremen

NUTMEG—63 bgs, Karl H Landes & E Balint, Macassar
63 bgs, Borneo Sumatra Trading Co, Macassar
38 bgs, Internatio Rotterdam, Macassar
67 bgs, Karl H Landes & E Balint, Hamburg
67 bgs, A G Dunn, Hamburg
OITICICA OIL—110 tons, Murray Oil Products Co, Fortaleza
300 tons, Pacific Vegetable Oil Corp, Fortaleza
OLEYL ALCOHOL—29 dms, Olympic Shipping Co, Liverpool
OLIVE OIL—100 dms, Manufacturers Trust Co, Malaga
25 dms, Chase National Bank, Malaga
100 dms, Irving Trust Co, Malaga
103 dms, National Shawmut Bank Boston, Malaga
225 dms, J H Schroder, Algiers
98 dms, Credit Suisse, Algiers
50 dms, Manufacturers Trust Co, Algiers
100 dms, Filippone & Co, Algiers
25 dms, Bella Donna Packing Co, Tarragona
350 dms, Luciano & Co, Tarragona
125 dms, National City Bank, Tarragona
100 dms, A & P Tea Co, Seville
PAPAIN—25 cs, Chas L Huisking & Co, Mombasa
24 cs, Colombo
PAPRIKA—190 bgs, Gallagher & Ascher, Alicante
50 bgs, J Weinstein, Alicante
343 bgs, A A Sayia, Alicante
1,600 bgs, Alicante
PATCHOULI LEAVES—322 bgs, L A Champon & Co, Mombasa
OIL—1 dm, Antoine Chiris, Panang
5 dms, George Lueders & Co, Penang
4 dms, American Trust Co, Penang
4 dms, Givaudan Corp, Penang
PEATMOSS—1,500 bls, Trans Sphere Trading Co, Bremen
1,000 bls, E J Lang, Bremen
3,300 bls, J E Bernard, Bremen
2,000 bls, E Dunwoody, Bremen
1,000 bls, Lion Trading Co, Bremen
2,500 bls, Marine Midland Trust Co, Bremen
380 bls, C Fafard, Bremen
4,440 bls, Premier Peatmoss Corp, Bremen
443 bls, C Gastmeyer, Rotterdam
500 bls, E J Lang, Hamburg
1,000 bls, Gellco Inc, Hamburg
750 bls, Bruco Peatmoss Corp, Bremen
1,500 bls, Bremen
PECTIN—64 kgs, Jafbro Corp, Copenhagen
PEPPER, BLACK—160 bgs, A C Israel, Mangalore
80 bgs, Otto Gerdau, Mangalore
80 bgs, Volkart Bros, Mangalore
54 bgs, Wm E Martin, Abidjan
80 bgs, Volkart Bros, Cochin
160 bgs, M Golodetz, Cochin
80 bgs, Mincing Trading Corp, Cochin
70 bgs, Internatio Rotterdam, Singapore
720 bgs, Alleppey
RED—114 bgs, M J Golombeck, Lagos
WHITE—32 bgs, Internatio Rotterdam, Singapore
35 bgs, Jacoberg Overseas Inc, Singapore
PETITGRAIN OIL—6 dms, John D Walsh Co, Buenos Aires
6 dms, VanAmeringen-Haebler, Buenos Aires
PETROLEUM, CRUDE—194,649 bbls, Phillips Petroleum Co, Puerto La Cruz
220,000 bbls, Socony Vacuum Oil Co, Puerto La Cruz
399,428 bbls, Esso Standard Oil Co, Puerto La Cruz
35,819 bbls, Cities Service Oil Co, Las Piedras
62,228 bbls, Cities Service Oil Co, La Salina
PHOSPHORIC ACID—2 pkgs, Singmaster & Breyer, Antwerp
PIMENTOLEAF OIL—3 dms, Magnus, Mabee & Reynard, Kingston
4 dms, George Lueders & Co, Kingston
2 dms, Olson Sales Agency, Kingston
2 dms, Orbis Products Co, Kingston
POLLACKLIVER OIL—150 dms, Consumers Import Co, Yokohama
62 dms, Arista Oil Products Co, Yokohama
50 dms, J D Smith Interocean, Yokohama
POLYETHYLENE—13 dms, Koppers Co, Rotterdam
POPPYSEED OIL—6 dms, Fallek Products Co, Hamburg
POTASH SALTS—25 kgs, A Gusmer, London
POTASSIUM FERRICYANIDE—200 bbls, Atlantic Raw Materials, Hamburg
PERCHLORATE—100 dms, C Hardy, Havre
POTATO MEAL—1,104 bgs, Morningstar Nicol, Havre
PSYLLIUM SEED HUSKS—400 bgs, S B Penick & Co, Bombay
200 bgs, T M Duche & Sons, Bombay
PYRETHRUM EXTRACT—110 dms, John Powell & Co, Mombasa
40 dms, McLaughlin Gormley King Co, Mombasa
50 dms, National City Bank, Mombasa
40 dms, Mombasa
FLOWERS—506 bls, S B Penick & Co, Dar es Salaam
PYRITES—157 cks, American Metal Co, Leixoes
QUASSIA CHIPS—570 bgs, S B Penick & Co, Kingston
QUEBRACHO EXTRACT—3,034 bgs, American Tanners Ltd, Buenos Aires
1,644 bgs, Tan American Corp, Buenos Aires
2,698 bgs, Tanimex Corp, Buenos Aires
QUINOLINE SULFATE—9 cs, Bremen
RAUWOLFIA HETEROPHYLLA ROOT — 23 bgs, Leonhardt E Brush, Puerto Barrios
HIRSUTA ROOT—269 bgs, J H Rodgers & Co, Puerto Barrios
RED IRON OXIDE—882 bgs, C K Williams & Co, Malaga
50 bbls, Whittaker, Clark & Daniels, Malaga
441 bgs, Whittaker, Clark & Daniels, Malaga
700 bgs, C J Osborn Co, Malaga
ROSEWOOD OIL—10 dms, Lo Curto & Funk, Belem-Para
11 dms, Dodge & Olcott, Belem-Para
RYANIA—2,497 bdls, S B Penick & Co, Port of Spain
SAFFRON—14 bgs, Vera Cruz
SAGO FLOUR—270 bgs, Olson Sales Agency, Singapore
SALICYLIC ACID—40 dms, R J Saunders & Co, Rotterdam
SANDALWOOD—60 bgs, S B Penick & Co, Bombay
OIL—9 cs, Lautier Fils Inc, London
SASSAFRAS OIL—8 dms, Magnus, Mabee & Reynard, Keelung
23 dms, Itajai
SEEDLAC—250 bgs, Schwab Bros, Bangkok
500 bgs, Borneo Sumatra Trading Co, Bangkok
250 bgs, Balfour Guthrie, Bangkok
405 bgs, Haeuser Shellac Co, Bangkok
500 bgs, United Shellac Corp, Bangkok
1,750 bgs, East Asiatic Co, Bangkok
1,250 bgs, Bangkok
SERPENTINA ROOT—360 bgs, Meer Corp, Bangkok
3 bls, Chas L Huisking & Co, Harve
59 bgs, Colombo
SESAME SEED—657 bgs, A Sahadi & Co, Cutuco
1,972 bgs, American Halvah Products Co, Cutuco
3,287 bgs, Independent Halvah & Candies, Cutuco
197 bgs, Levy & Levis Co, Corinto
250 bgs, Archibald & Kendall, Corinto
HULLED—1,800 bgs, Wm G Scarlett, Corinto
400 bgs, Archibald & Kendall, Corinto
300 bgs, Levy & Levis Co, Corinto
200 bgs, M J Golombeck, Corinto
200 bgs, C M Van Sillevoldt, Corinto
SHARKLIVER OIL—50 dms, Peder Devold Oil Co, Yokohama
5 dms, Arista Oil Products Co, Yokohama
SHELLAC—65 bgs, Mac Lac Co, Bangkok
25 bgs, Dings & Schuster, Bremen
27 bgs, F H Paul & Stein Bros., Hamburg
WAX—22 bgs, Dings & Schuster, Bremen
SOAP BARK—159 bls, S B Penick & Co, Valparaiso
SOAPNUT SHELLS—99 bgs, S B Penick & Co, Bombay
SODIUM ALGINATE—2 bbls, Croda Inc, Oslo
ALUMINATE—200 dms, Chemical Manufacturing Co, Liverpool
BICARBONATE—499 bgs, Chemical Manufacturing Co, Liverpool
CARBONATE MONOHYDRATE—20 bgs, Yardley of London, Liverpool
CYANIDE—50 dms, C Hardy, Harve
PEBORATE—15 dms, Lo Curto & Funk, Liverpool
SILICO FLUORIDE—300 bgs, Riches Nelson, Rotterdam
SPERM OIL—500 dms, Guaranty Trust Co, Pisco
SULFUR—75 bgs, Dorf International Ltd, Gothenburg
TALHA GUM—50 bgs, Stein Hall & Co, Port Sudan
51 bgs, National City Bank, Port Sudan
TAMARINDS—40 bbls, Murbas Trading Co, Montserrat
TAPIOCA FLOUR—3,200 bgs, Stein Hall & Co, Tjirebon
THIAMINE HYDROCHLORIDE—5 cs, D Hauser, Kobe
TOLYLENE DIAMINE—17 dms, Naftone Inc, Rotterdam
TRIHYDROXYBENZENE—4 cs, Harrison & Crosfield, London
TUNALIVER OIL—3 dms, Arista Oil Products Co, Yokohama
TUNG OIL—140 tons, Pacific Vegetable Oil Corp, Buenos Aires
TURMERIC—112 bgs, Magnus Mabee & Reynard, Kingston
377 bgs, Mincing Trading Corp, Kingston
34 bgs, Kellys America Ltd, Kingston
199 bgs, Alleppey
ULTRAMARINE BLUE—20 dms, Antwerp
UREA, SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Liverpool
VANILLA BEANS—258 cs, Norda Essential Oil & Chemical Co, Vera Cruz
4 cs, First National Boston, Dominica
3 cs, Girard Trust Bank, Dominica
13 cs, Camax Co, Tamatave
15 cs, Djibouti
VETIVER ROOTS—100 bgs, Norda Essential Oil & Chemical Co, Puerto Barrios
VITAMIN A—1 dm, Fallek Products Co, Kebe
C—75 cs, Byron Chemical Co, Kobe
WATTLE EXTRACT—2,790 bgs, Barkey Importing Co, Mombasa
1,095 bgs, River Plate Corp, Mombasa
542 bgs, Hammond & Carpenter, Durban
WHITING—800 bgs, Whittaker, Clark & Daniels, London
800 bgs, Pluess Staufer, Antwerp
WOOL GREASE—60 dms, Phoenix Oil Products Corp, Dublin
YLANG YLANG OIL—1 ck, Felton Chemical Co, Havre
ZIRCONIUM CARBONATE—82 bbls, Melberk Inc, Liverpool

Baltimore

LITHARGE—100 dms, Tampico
PAPRIKA—200 bgs, Alicante
RED IRON OXIDE—1,766 bgs, American Chemical & Pigment Corp, Malaga

Los Angeles

AGAR—18 csks, Hilner International Corp, Copenhagen
COPRA—500 long tons, Paul X Smith, Cebu
6,000 bgs, Lu Do & Lu Ym Corp, Cebu
1,000 long tons, American Trust Co, Cebu
800 long tons, Procter & Gamble Co, Cebu
5,600 bgs, Wilbur Ellis Co, Manila
CAKE—4,480 bgs, American Trust Co, Zamboanga
6,720 bgs, Pacific Vegetable Oil Corp, Zamboanga
GELATIN—30 bbls, Colgnet Chemical Co, Antwerp
PEPPER, RED—36 bgs, Consolidated Foods Corp, Moji
UREA—5,511 bgs, Antwerp

Norfolk

LOCUST BEAN GUM—400 bgs, National City Bank, Valencia

Philadelphia

BONE—173 tons, Transatlantic Animal By-Products Corp, Buenos Aires
MOLASSES—2,975,843 gals, Manati
NAPHTHALENE—1,000 bgs, Fallek Products Co, Antwerp
1,636 bgs, Chematar Inc, Gdynia
1,603 bgs, Rotterdam
PEATMOSS—500 bls, Vandergrift Co, Bremen
3,020 bls, Bremen
PETROLEUM, CRUDE—412,675 bbls, Gulf Oil Corp, Puerto La Cruz
363,294 bbls, Gulf Oil Corp, Mena Al Ahmadi
119,099 bbls, The Texas Co, Covenas
105,020 bbls, Atlantic Refining Co, Las Piedras
112,358 bbls, Atlantic Refining Co, Tripoli
119,601 bbls, Atlantic Refining Co, Pamatacual
123,463 bbls, Socony Vacuum Oil Co, Covenas
404,758 bbls, Socony Vacuum Oil Co, Mena Al Ahmadi
109,419 bbls, Atlantic Refining Co, Puerto La Cruz
400,369 bbls, The Texas Co, Sidon
134,674 bbls, The Texas Co, Las Piedras
QUEBRACHO EXTRACT—2,048 bgs, Tan American Corp, Buenos Aires
TAPIOCA FLOUR—600 bgs, Stein Hall & Co, Itajai
VANILLA BEANS—10 cs, Zink & Trieste, Tampico
WHITING—33 tons, Antwerp

San Francisco

CALCIUM NITRATE—62,000 bgs, Wilson & Geo Meyer & Co, Heroya
CASEIN—70 bgs, Royal Bank of Canada, Buenos Aires
260 bgs, F H Paul & Stein Bros, Buenos Aires
150 bgs, Tupman Thurlow, Buenos Aires
1,000 bgs, Borden Co, Buenos Aires
160 bgs, Pacific National Bank, Buenos Aires
181 bgs, Buenos Aires
COPRA—500 tons, Cargill Inc, Surigao
1,000 tons, Bank of California, Medina
500 tons, Cargill Inc, Iloilo
1,000 tons, Cargill Inc, Cebu
CRESOTE—1,580 tons, Bernuth Lembeke Co, Amsterdam
GRAPHITE—200 bgs, Pacific Graphite Co, Colombo
HERRINGMEAL—2,000 bgs, Wilbur Ellis Co, Bergen
36,200 bgs, Wilbur Ellis Co, Haugesund
JUNIPER BERRIES—12 bgs, Bank of America, Leghorn
LIVERMEAL—273 bgs, National City Bank, Montevideo
MOLASSES—1,108 tons, Southwestern Sugar & Molasses Co, Iloilo
PAPRIKA—50 bgs, S H Tyler & Sons, Marseille
300 bgs, A Schilling Co, Marseille
45 bgs, Spice Islands Co, Marseille
PEPPER, RED—100 bgs, M S Cowen Co, Kobe
QUEBRACHO EXTRACT—110 bgs, River Plate Corp, Buenos Aires
SESAME SEED—350 bgs, Hismoco American Co, Corinto
400 bgs, Baxters Supply Co, Corinto
200 bgs, Lastreto Phillips Co, Corinto
500 bgs, H M Newhall & Co, Corinto
100 bgs, Grace & Co, Corinto
TAPIOCA FLOUR—700 bgs, American Key Products, Bangkok
UREA—20,663 bgs, Atkins Kroll & Co, Antwerp
WHITING—1,000 bgs, Antwerp

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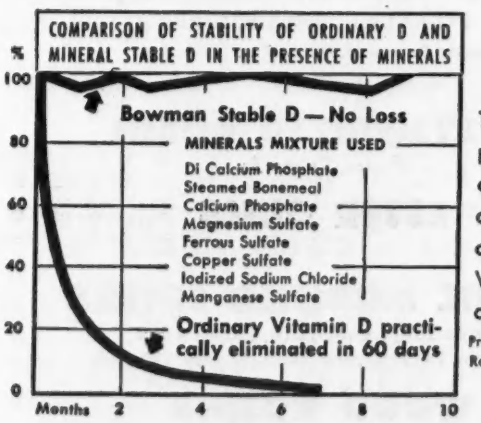

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SPECIFICATIONS: (Resublimed). COLOR, white; SUBLIMATION min. 99% granular or lump, 98½% powder; WATER INSOLUBLE, none; HEAVY METALS, none; IRON CONTENT max. 0.01% (Sublimed). COLOR, light yellow to gray; SUBLIMATION min. 98% granular or lump, 97.5% powder; WATER INSOLUBLE max. 1.0%; HEAVY METALS, none; IRON CONTENT max. 0.05%. **PARTICLE SIZE:** (Resublimed and Sublimed). POWDER—20 mesh; GRANULAR—4 + 20 mesh; LUMP—1 + 4 mesh—also special mesh sizes may be had to order.

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MALEIC MODIFIED ESTERS
Lacros 294, Lacros 1016, Lacros 1418
Lacros 1420, Crosby 1015, Crosby 1417

WOOD ROSINS
All Grades

GLOSS OILS
Gloss Oil B, Gloss Oil 60, Gloss Oil 65

EPON ESTERS
Eplex 10, Eplex 15, Eplex 16

REPRESENTATIVES IN ALL PRINCIPAL CITIES

Protective Coatings Materials

Increased demand for paints and paint materials made itself felt in many areas of the protective coatings market, including synthetic resins. Alkyds moved quite well and occupied a firm position. Supplies were adequate for consuming needs, in spite of a very good rate of demand. Soybean oil prices remained stable from an overall viewpoint, although minor fluctuations from week to week were encountered. Demand for paint emulsions hit a good stride and appeared to be in the midst of the most active consuming season. Polyvinyl formal resins enjoyed a good demand from the electrical industry and were expected to continue to make a good showing over the coming weeks.

A fairly close balance was maintained between dioctyl phthalate sales and production. As yet, there was no actual pinch in supplies. However, with phthalic anhydride still tight, any substantial increase in buying of DOP could make for a tight market situation. Prices were considered quite firm. Other plasticizers moved well to a broad consuming demand.

Supplies of titanium dioxide were rated none too ample, although there appeared to be no shortage at the present. This market, in fact, appeared to be heading toward an easier supply situation in the months ahead. Lead oxide encountered a good demand, with consumption by automobile battery makers lending greater force to present consumer buying. Synthetic iron oxides were steady after making an advance earlier. Shortages continued to plague makers of nickel and selenium-containing pigments, with the result that a certain amount of demand for these materials remained unsatisfied. Zinc metal was firm, making for a strong situation for the pigments. Following word that the government planned continuance of its stockpiling program for zinc and other metals, the outlook for zinc pigments took on added strength.

Argentine casein firmed, following earlier action by the IAPI in raising its floor price by ½c per pound. French production has been retarded by continued cold weather to the extent that dealers in that country still could not offer material at prices competitive with the Argentine. Buying in this country continued quite dull.

Prime Pigments

Aluminum Paste, Powder — Material was reported moving well to a healthy consuming interest. Prices remained steady and were considered firm at current listings.

Cadmium Colors—Most sources found their production moving along at a good rate into consuming channels. There were adequate supplies to take care of present needs, with the exception of cadmium sulfoselenium reds, which continued in a tight position in response to the shortage of the metal.

Carbon Blacks—Sales have moved considerably ahead of those for the same period of last year, it was stated in the industry. The tire industry, as well as other consumers, have kept up a good rate of demand. Prices remained steady, and from present indications in the industry, no chnges were contemplated for the immediate future.

Copper Oxides — Pigment quotations displayed a good deal of strength by reason of the very strong position of the metal and the active call for pigments from the paint industry. Most makers reported that they were able to keep up with their customers' needs, but were not in the position of building up large inventories.

Iron Oxides—Synthetic iron oxides were steady after making an advance earlier. Red iron oxides as yet were not changed. Material was said to be moving well right now in an active market.

Lead Pigments — Producers have reported a very good demand, and noted particularly active sales from the paint trade. The outlook appeared quite good for the immediate future, since the seasonal upturn in paint sales was felt to be proceeding at full steam and not due to slacken until late in the current quarter, if it followed the pattern of other years. Lead oxide encountered a good demand, with consumption by automobile battery makers lending great force to buying pressure. With automobile output continuing at record levels, this source was expected to account for a large portion of the present sales totals.

Titanium Pigments—Supplies were rated as fairly close to the present high rate of demand, but there was no immediate outlook for an actually tight situation. In fact, some easing in this supply balance was expected to come about later in the year, when paint needs have been satisfied and begin to drop from the seasonal highs now being experienced.

Zinc Oxide—Firmness in the metal, together with an active demand for zinc pigments themselves, added up to a strong market situation for these materials. Following word that the government planned continuance of its stockpiling program for zinc and other metals, the outlook took on added strength. Reordering of zinc oxides has been quite active from the direction of the paint trade, and was expected to continue unabated over the weeks just ahead. However, supplies were reported easily adequate for present consuming demand.

Zirconium Oxide—Price reductions in zirconium metal produced no effect on zirconium oxide quotations, as the materials were unrelated. Sales of lump and milled zirconium oxide moved well to a steady demand and were considered quite stable in price at the present. Supplies were adequate for consumers' needs, it was reported.

Lacquer Materials

Dioctyl Phthalate—Sales were reported proceeding quite well from most producers' viewpoints. At the present rate, a fairly close balance between consumption and output has been achieved, it was stated. Prices were quite steady and firm at present listings of 30½c. per pound in carlot quantities. With phthalic anhydride supplies continuing in the tight category, there was some pressure on makers of phthalate plasticizers, and some feeling that any increase in consumption of DOP might strain present production rates. However, as yet, demand has been met without undue difficulty.

Dioctyl Sebacate—Demand for dioctyl sebacate has maintained a healthy undertone as consumers reordered in quantity. Prices were steady at their former level of 61c. to 61½c. per pound in carlot quantities. Right now there was no apparent pressure on quotations and no changes were expected in the industry, it was reported.

Synthetic Resins

Alkyds—With the spring paint season well under way and sales accordingly receiving a boost from this direction, producers found material moving quite well and the market occupying a very firm situation. Soybean oil prices, it was noted, remained stable on an overall viewpoint, although minor fluctuations from week to week were encountered. Alkyds were in

Price Trends

Advanced
Casein, Argentine, ½c. per lb.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 14, 1954
97.17	97.17	97.14	96.59

(For Current Prices see Page 9)

Protective Coatings Shipments, Output: March

	Factory shipments—Dollars		†Reported production—Gallons	
	March	February	March	February
Trades sales products: paint, varnish and lacquer	$78,630,000	*$59,660,000	21,453,000	16,736,000
Industrial sales products, total	53,818,000	44,363,000	20,916,000	17,130,000
Paint and varnish	39,680,000	32,000,000	15,495,000	12,335,000
Lacquer	14,138,000	12,363,000	5,421,000	4,795,000
Totals	$132,448,000	$104,023,000	43,433,000	34,814,000

Total sales, January through March:—$346,447,000.

† Detail does not add to total because some respondents reported only total production which was not allocated either to trade or industrial sales products.
* Revised.

For Late Market Developments, See Page 4

adequate supply in spite of the present good rate of demand, it was reported from several directions.

Polyvinyl Acetate—Demand for paint emulsion resins has hit a good stride and appeared to be in the midst of the most active consuming season. Producers generally agreed that sales were going exceptionally well at the present, and that for the present quarter and for the first half of the year, as well, sales would be well ahead of those for last year. Actual percentage increases were as yet largely estimates, however. Polyvinyl formal resins enjoyed a good demand from the electrical industry and were expected to continue to make a good showing over the coming months. Consuming interest in these materials, it was pointed out in the industry, normally continues steadily throughout most of the year, with a slack period ordinarily encountered only toward the end of the year, during November and December. Supplies were reported to be quite adequate, at the present, for the market's requirements.

Natural Resins

Copal, Dammar Gums—The market at the present appeared stabilized to most viewers in the trade, although there was a firm undertone to supplier's attitudes at the sources. Most grades remained in good demand from conumer's in countries other than the United States, it was pointed out, with Europe and Australia among the more prominent. Therefore, prices were expected to remain even at their present levels. Demand from consumers in the country has continued fairly active, it was stated by sources in trade.

Shellac—Prices for bleached grades were steady after dropping 2c. per pound during the week previous. No further changes were expected in the immediate future, as holders in Calcutta have given evidence of moving slowly.

Orange grades were a bit easier in tone but were quite scarce. Dealers pointed out that the decline in prices for forward shipment from Calcutta had been precipitous, but that further price movement could not be expected to be so drastic. Even though some lower quotations are expected, the decline would proceed more slowly in the weeks ahead, it was believed. Buying by consumers in this country has been quite good, it was reported, and was expected to hold up well for some time. Buyers would soon realize, it was stated, that they could not do too much better on quotations than at the present, and could be expected then to enter the market to cover their needs.

Miscellaneous Materials

Casein—Offering prices of Argentine material firmed a bit, going to at least 22½c. to 22¾c. per pound on a duty-paid basis. The increase came partly as a result of the action of the IAPI in raising its floor price by ½c. per pound, during the week previous. French production has been retarded by cold weather to a point where dealers in that country still could not offer material at prices competitive with the Argentine. Buying in this country continued quite dull, as many consumers held off with purchases in the hope of obtaining better quotations in the future. In addition, many of the big consuming mills were reported to be quite well stocked at the present.

Holland and Denmark will not be able to submit any offers, it was reported, as they will be unable to compete with the Argentine, pricewise. Germany, in addition, appears to be having the same difficulty, according to reports.

Naval Stores

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. May 6	Mon. May 9	Tues. May 10	Wed. May 11	Thur. May 12
Drums—					
E	...			...	$8.11
K		$8.05	$8.23		
M	$8.20			$8.19	8.25
WG		8.14§	8.24	8.23§	8.33§
WW	8.36§	8.35§	...	8.38§	...
Bags—					
H	...	8.05	...	...	...
K				...	8.23§
M	8.05	8.05	8.05	...	8.05
N		...			8.10
WG	8.34	...	8.35	8.30	
WW	8.44	...	...	...	8.45

Tankcars (for week ended May 6)—K or better, $8.02§; M, $7.80; N, $7.85; WG, $7.88§

Sales, USDA

907* 1.294* 923* 844* 492*

New York
(per 100 lbs., c.l., Friday)

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.566§	.58½	.566§	.563	.563§
Sales	23,000¶	10,000¶	10,000¶	42,000¶	32,000¶

New York, Friday, per gal. 7 lbs., tankcars, 73c., l.c.l. 62½c.

*Drums equivalent. ¶Gallons. §Average price.

Sun Chemical Subsidiary Appoints Sales Manager

Fred A. Wichelman has been designated sales manager of the retail distributors division of A. C. Horn Company, a subsidiary of Sun Chemical Company, Long Island City, N. Y. Mr. Wichelman will direct retail distribution of Horn products for Sun Chemical principally among paint and wallpaper departments of department stores. He goes to his new post from the sales managership of the A. C. Horn trade sales division of Sun Chemical.

Haber Laboratories Formed

Richard Haber, president, has announced the formation of Haber Laboratories, Inc., 18-17 130th street, College Point, N. Y. Mr. Haber said the concern will engage in the manufacture of fine and organic chemicals, intermediates and pharmaceuticals. Mr. Haber was formerly president of Hexagon Laboratories.

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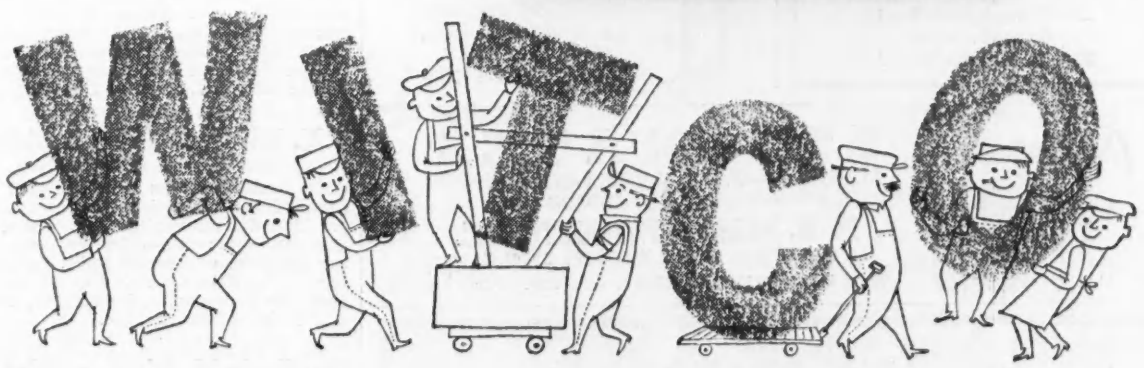

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Gelled Paints Discussed Before N. Y. Vehicle Unit

The vehicle manufacturers committee of the New York Paint, Varnish and Lacquer Association at its meeting last week heard a discussion on the new gelled paints by Nick G. Contos, technical director of T. G. Washburn Company, Chicago.

The gelled paints, he pointed out, are unique in many ways. Perhaps, their greatest appeal, he said, is that they tend not to settle, drip, run, sag or spatter. He indicated that they derive these properties from the fact that the vehicle solids from which they are made are inherently very thixotropic.

Thixotropy, it was explained, is the term applied to the ability of a paint to be quite thick and heavy in body in the can. Yet, it was pointed out, this heavy body is a false body, since it breaks down immediately giving a fluid and evenly flowing paint when an outside force is applied to it, as by the shear and stress of brushing.

When the paint is in place and motion is stopped, the false body or gell structure is regained by the paint, thus preventing running and sagging. However, it was indicated that the gell structure does not set up so quickly as to bar good flow out of brush marks.

In the paint vehicles manufactured by his company, Mr. Contos said, the gelled vehicle solids are obtained by incorporating into the alkyd resin, under carefully controlled conditions at high temperature, a polyamide resin.

Lummus Awarded Contract To Build Finnish Refinery

Neste Oy, a firm controlled by the Finnish Government, has announced the awarding of an engineering and construction contract for an 18,000 barrel per day petroleum refinery to Lummus Company, New York. Expenditure associated with this project will amount to approximately $17,000,000.

The new installation, to be located near Turku, Finland, will process 750,000 tons per year of crude oil and will supply a substantial part of Finland's petroleum requirements. The balance of products contemplated is in approximately the same proportions as average United States refineries. The refinery, which will be the world's northernmost, is being designed to handle crude oils from the Middle East, as well as the Black Sea area.

Distribution of refined products is expected to be handled mainly through existing distribution companies in Finland, but is dependent on final agreements to be reached. The contract with Lummus provides for detailed engineering, purchasing assistance, construction supervision, and assistance during initial operation. Engineering is to be carried out by Lummus in New York and by Lummus subsidiaries in The Hague, London and Paris.

N.Y. PVLA Installs President

The New York Paint, Varnish & Lacquer Association has installed Carl Iddings, of Iddings Paint Company, as its president for the coming term. Other officers installed were:—Vice-president, Lester Arnstein, of Arnesto Paint Company; secretary, Walter M. Clark, of Nuodex Products Company, and treasurer, Benjamin Farber of Farnow, Inc.

Dr. Carle M. Bigelow Dies

—Continued from page 7

turers Association, of which he was vice-president in 1940; American Society of Mechanical Engineers; Society for Advancement of Management; Drug, Chemical and Allied Trades Section of the New York Board of Trade, of which he was chairman in 1941, and fellow and former president of the Institute of Management. He was also a member of the Chemists' Club and the Drug and Chemical Club, both of New York.

Martin H. Crego

Martin H. Crego, retired sales manager of Phelps Dodge Corporation, New York, and assistant secretary of Phelps Dodge Refining Corporation, died May 7 in Brooklyn, N. Y. He was seventy-eight years old. Mr. Crego joined Phelps Dodge in 1892 and remained with the company until his retirement in 1949.

William A. Houser

William A. Houser, purchaser of the Ancor Nitrate Plant, Cincinnati, Ohio, after World War I, died May 9 in that city. He was seventy-eight years old.

Alfred C. Bowman, manager of the real estate department of Borden Company, New York, died May 11 in that city. He was sixty-six years old.

Edson L. Cannon, founder and president of Warren Refining Company, Cleveland, Ohio, died May 7 in that city. He was eighty-one years old.

Charles Deere Wiman, president of Deere & Co., Moline, Ill., died May 12 in Tucson, Ariz. He was sixty-three years old. Mr. Wiman's firm is primarily a maker of farm equipment, but has interests in the agricultural chemicals' field, as well.

Charles Everett Carr, former chairman of the board of National Drug Company, Philadelphia, died April 28. He was eighty years old.

Charles H. Lee, assistant manager of Esso Standard Oil Company's Cuban branch, died May 7 in Havana, Cuba. He was forty-eight years old.

Arthur G. Linde, sales representative of Givaudan Flavors, Inc., New York, died May 6 in Fort Hamilton, N. Y.

John Sokoloff, assistant to the plant manager of E. R. Squibb & Sons Division of Olin Mathieson Chemical Corporation in New Brunswick, N. J., died May 9 in New Brunswick.

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Petroleum Derivatives

Consumers continued to buy good amounts of aromatic and aliphatic material. Buyers asserted their desire to make conditions firmer in all departments. Production levels were still reported to be climbing, and manufacturers cited the reason for this continued increase as a caution against being caught short in the event demand picked up at a quick rate without warning. Solvents and diluents were moving well at all points, although many producers stress the fact that inventories are heavy, and in most cases, adequate to meet new demand.

Activity in the benzol market was described as stable last week. Increased imports from iron curtain countries were being watched closely by domestic producers. The foreign material is reportedly being sold at lower prices. Cleaners' naphtha sales surprised some producers who thought earlier that demand would not reach important levels. So far, a bright situation was noted. Industry sales of heptane were light, and an uncertain effect seemed to dominate the market.

Domestic paint sales continued to climb as spring progressed. The automobile industry was reported buying more than its share of material. Competition was tight in most areas, but volume sales served to offset this condition. New uses and substitution of partial aromatics for the more expensive full aromatics has increased considerably over the past few months. This diversification in usage has improved the market situation considerably. Toluol production was still much higher than goverenment or industrial demand, leaving an easy market.

Xylol demand during April was reported to be good, and predictions for May are even better. No cutbacks in production are being planned, it was noted. Propane and butane suppliers kept things even last week, with new promotional ideas being added to increase summer sales. Inquiries from buyers for waxes were increasing steadily. Food container manufacturers were taking more and more material. A tight supply and demand basis was noted in the industry.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 14, 1954
104.32	104.32	104.32	104.75

(For Current Prices see Page 9)

Solvents and Diluents

Benzol—Market activities were stable during the past week. Producers cited the increased importation of iron curtain material from coaltar sources as an important factor in future market activities. The foreign product is reportedly being sold at considerably lower prices. On the domestic scene producers stated that plenty of material was readily available, and demand has picked up in the last few months. April was one of the better months for sales, and May is expected to equal or perhaps better this record, trade sources noted. Price schedules were unchanged.

Cleaners' Naphtha—As warmer weather approached steadily, cleaners' naphtha sales moved quite well, industry sources noted. Despite predictions that domestic cleaners sales would be off considerably because of the increased use of synthetic fibers in clothing, the situation at present is most heartening, according to both producers and consumers. Present conditions were expected to continue for most of the summer months.

Heptane—Sources indicated that it was difficult to tell when the present uncertain condition prevalent in this market would change. Government buying was off, according to producers. Sales to industry were said to be lower than usual, and no one concerned could say when the conditions would change. Price listings were unaltered over the past week.

Mineral Spirits—Because of the heavy buying reported throughout most of the domestic paint stores, mineral spirits producers were prepared to keep production figures at a good rate for the months just ahead. Competition was heavy in most areas, but volume sales served to offset this condition. Most producers seemed satisfied with present conditions, although they noted that any buying spurts could be handled with comparative ease. Quotations were unchanged.

Partial Aromatics—Industrial users described the emphasis on diversification of this material as expanding more and more each week. New uses and substitution of partial aromatics for the more expensive full products has increased considerably over the past few months. Production was steady at a good rate in most plants, with strong indications of good sales for the month of May. Previous listed quotations were the same.

Toluol—Production continued to exceed both government and industrial demand by a large figure, according to industry sources. Most producers stated that present production rates would continue, since a cutback might leave suppliers short if demand suddenly increased. Despite the backlog of material, no indication was given of a price cut. Toluol was still in an uneasy position, as compared with other aromatics, sources reported.

Xylol—Demand during April was said to be very good, and producers stated that May will also show good results in most quarters. Buying was on the upswing in industry. Stocks were said to be ample to meet any new demand, but production continued at a heavy rate. Most producers gave the same reason for heavy production of xylol as that given for present toluol rates; a cutback of any proportion may leave manufacturers short in the event of an increase in demand. Listings for this product were the same as last week.

Lighter Fractions

LPG's—Aside from previously listed price changes, the market was quiet in most areas over the past week. Suppliers were still busy adding new promotional ideas for propane and butane during the warm weather, slow-buying months. Inventories were being increased at most points, producers noted. Dealers were watching sales figures closely, and competition was said to be becoming tighter. Previous week's new price listings were in evidence again last week.

Waxes

Microcrystalline—Wax makers indicated a bright picture over most of the market last week. More and more inquiries from buyers were being received, sources stated. Production was at practically full force to meet the increased demand. Current quarter sales were high, but most manufacturers stated there had been better periods.

Paraffin—Wax-covered food containers were being produced at record rates, industry sources reported. Consequently, the wax manufacturers were selling most of the paraffin produced on a tight supply and demand basis. Some producers noted that summer cutbacks in plant schedules would not affect sales to any great extent. Prices were firm at previous listings.

Los Angeles Petroleum Market

Los Angeles—Propane continued in only fair to moderate demand with supplies ample. Postings were firm and unchanged at .059c. per gallon, tankcars, f.o.b. Los Angeles. Steady inquiry was maintained for butane in the Basin area with stocks limited; quotations unchanged at .069c. per gallon.

Excellent demand for high melting point paraffin waxes was reported, particularly from domestic consumers. Producers reported stocks in balance with no surplus of any grade on hand. Prices were firm.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended April 30 totaled 274,976,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 272,781,000 barrels for the preceding week, this represents an increase of 2,195,000 barrels comprising an increase of 1,527,000 barrels in stocks of domestic crude and an increase of 668,000 barrels in stocks of foreign crude.

For Late Market Developments, See Page 4

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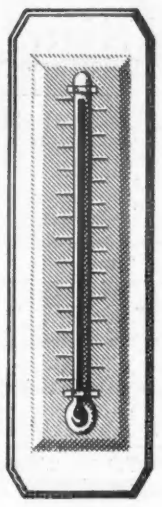

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Virus Growth Strides Told

—*Continued from page 7*

plicated this type of the microbe as a cause of infantile diarrhea. Dr. Eugene L. Nowicki, of the University of Texas Medical Branch, Galveston, described a new factor which causes deterioration of the bacteria in the urine of salmonella-infected animals.

Laboratory findings indicate that some types of now incurable cancer may one day be obliterated by the injection of disease viruses, it was revealed. Drs. Alfred M. Prince and Harold S. Ginsberg, of Western Reserve University, Cleveland, reported that injections of the Newcastle disease virus had killed a tumor known as Ehrlich ascites in mice with no damage at all to the animal's tissues.

Similar Results Reported

Drs. Alan Bernstein, Lila Pope and M. Michael Sigel of the Public Health Service Laboratory in Montgomery, Ala., reported similar results after dosing cancer-ridden mice with the meningopneumonitis virus. Also of Western Reserve University, Dr. R. F. Haff and H. E. Swim reported that in the test tube at least, the vaccinia virus has a greater affinity for destroying certain types of cancer cells than for noncancerous tissues. Dr. Zbigniew T. Mankowski of the Lankenau Hospital, Philadelphia, declared that various types of molds and mold extracts have successfully destroyed tumors in mice, too.

Antiserum Kills Cancer Cells

Similarly, Drs. Isabel M. Mountain, Katherine Sprunt and Hattie E. Alexander, of Columbia University, reported that antiserum obtained from animals which had been injected with human cancer cells killed these cancer cells in the test tube. The destructive effect of certain viruses on some animal cancers is well known but the exact reasons why this reaction takes place have not yet been completely documented. Recent research, however, indicates that destruction of the cancer cells may be the outgrowth of competition between the virus and the cancer for food materials.

All of these virus vs. cancer experiments, however, have yet to get out of the test tube and the scientists underscored the fact that no sound conclusions as to the advisability of treating cancer in humans by virus therapy can be drawn at this stage. They noted that surgery and irradiation, the most common treatments in use today, have successfully worked against only a few types of cancer, but that further experimentation might develop more effective means of cancer therapy.

Other papers focused on recent advances in general bacteriology, including a study of the effectiveness of chlorinated reservoir water in killing typhoid and dysentery bacteria. Presented by Drs. W. N. Adams, P. N. Nichols and L. P. Gebhard, of Camp Detrick and the University of Utah Medical College, Salt Lake City, the latter report observed that the antibacterial effect of chlorination in alkaline water kept at low temperatures was so slow as to be useless. Should a reservoir ever be contaminated in cold weather, treatment by chlorination would be ineffective, it was pointed out.

Food Contamination Discussed

Food contamination was discussed by Drs. Lloyd L. Kempe and John T. Graikoski of the University of Michigan and by J. H. Richardson and W. S. Oglivy of the research division of Armour & Co., Chicago. Drs. Kempe and Graikoski reported that a combination of radiation and heat treatment effectively kills spores of the bacterium which causes botulism and thus offers the possibility of more rapid and safe sterilizing of foods.

Drs. Richardson and Oglivy reported success in sealing the surface of both wood and concrete walls with paints containing antibacterial and anti-mold agents. This type of paint, they declared, does not flake out and may find wide application in food processing plants.

Though treating bandages, infant's wear and bedding with germicidal reagents has come into widespread practice, not all fabrics take to this treatment with equal efficiency, according to Drs. M. T. Goldsmith, M. A. Latlief, J. J. Friedl and L. S. Stuart of the Department of Agriculture. Wool, they noted, absorbs more germicide than cotton but does not consistently check bacterial action. Nylon is less absorbent, while cotton not only absorbs readily but proved effective against the bacteria tested.

There are present in the soil near oil fields bacteria capable of metabolizing petroleum chemicals like methane, butane and propane, according to Drs. R. J. Strawinski and J. A. Tortorich of Louisiana State University, Baton Rouge. They pointed out that the presence of such bacteria might help "tip off" prospectors to the presence of oil.

Textile and Leather Chemicals

Consuming demand for textile and leather chemicals continued fairly active, chiefly for prompt requirements. Market remained steady at prevailing levels, for most materials, except egg yolk which was reduced 2 cents per pound in some directions. Increased interest in sago flour for shipment from primary sources stiffened the market and prices of replacements were advanced fractionally.

In the chemical group, bichromates continued to move in steady volume against current contracts. Sodium hydrosulphite also was in good request.

Production of domestic potato starch was sold ahead and offerings continued scarce. This has increased interest in foreign starch and a good volume of business was reported for shipment from Holland. Offers of Danish starch were scarcer and the bulk of transactions was centered in the Dutch material. Brazilian tapioca flour commanded more interest and paper manufacturers in the North were receiving direct shipment at plants. Inquiry for Siamese and Javanese flour continued inactive and most of the business lately has been confined to the Brazilian material. Corn starch and dextrin continued in good demand for prompt needs.

Interest in tanning materials continued light. Primary markets were steady at current quotations for shipment. Trading continued spotty, chiefly for nearby shipment to replenish low inventories.

A new sales policy to speed disposal of government owned wool is planned by the Department of Agriculture to become effective November 1. Meanwhile, present minimum selling prices will be continued at 103 percent of 1954 wool loan rate plus sales commissions. CCC owns or has under loan about 130,000,000 pounds of wool, enough to supply domestic mills for two to three months. The new sales policy, the department stated will have as its objective the reduction of CCC wool within two years. The government no longer buys wool to support prices. Under a new program wool growers sell their clip in the open market. If the price is below a fixed minimum they receive an incentive payment to give them an average of 62 cents per pound.

Price Trends

Advanced
None

Reduced
Egg yolk, 2c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 14, 1954
103.95	103.95	103.97	95.64

(For Current Prices see Page 9)

Chemicals

Bichromates—A good volume of deliveries continued last week. Prices were without change and firm.

Sodium Acetate—Business was moderate for prompt needs. Quotations were unchanged and steady.

Sodium Hydrosulfite—A fairly good demand was noted over the past week. Prevailing quotations were well held.

Sulfonated Oils—Demand was reported spotty in most areas. Unvaried prices were described.

Sizing Materials

Albumin Blood—Fair volume of business was noted for prompt requirements. Prices were unchanged, ranging from 65c. to 80c. per pound, depending on quality. Stocks were ample.

Corn Dextrin—Business was fairly active for immediate delivery. All grades were maintained at former levels. Gum remained at $8.95 per 100 pounds, paper bags, carlots, New York delivery; canary $8.69; dark $8.79, and white, $8.53, same basis. Less carlots were 15c. per 100 pounds higher.

Corn Starch—Moderate sales were reported for prompt requirements. Prices were unchanged and steady. Pearl was maintained at $7.14 per 100 pounds, paper bags, carlots, and powder, $7.29 per 100 pounds, same basis. Smaller quantities were 15c. per 100 pounds higher. Visible corn supply decreased 135,000 bushels to 31,877,000 bushels for the week ending May 6, compared with 19,161,000 bushels for the correspnding week last year, it was reported by the Chicago Board of Trade.

Egg Albumin—Business volume was reported good for prompt delivery. Flake ranged from $1.64 to $1.66 per pound, as to quantity. Powder showed little change with listings the same as last week at a range of $1.68 to $1.70 in most quarters. Technical product was quoted at a range of 70c. to 85c. per pound, according to seller and quantity.

Egg Yolk—This market was unsettled, with demand limited to actual needs. Prices in some quarters were lowered 2c. last week. Other producers have maintained former levels. Prices ranged from $1.08 to $1.12 per pound, as to seller, and quantity.

Potato Starch—Consumers showed more interest in imported material because of the unavailability of domestic starch. Sales of moderate volume were booked in some areas, and more demand has been received in recent weeks than had been expected. Dutch starch continued to be available in greater quantities than any other source. Danish orders placed some time ago were being filled, but new sales were slow. French starch was said to be unavailable. Maine listings were still nominal at 7¼c. per pound, carlots, f.o.b. mills, and Idaho at 6¾c. per pound, same basis, nominal. Dutch prices were maintained at a range of 7.90c. to 7.95c. per pound, carlots, exdock, duty paid, for prompt shipments, and French starch at 7.35c. per pound, same basis.

Sago Flour—Better demand created a firmer tone in the primary market and quotations were higher at 6c carlots exdock, prompt. Refined was held at 8¼c. to 8¾c. per pound, and raw at 6½c. to 6¾c., ex-warehouse depending on quantity.

Tapioca Flour—Improved buying interest was being noted since potato starch assumed its short position. In particular, paper manufacturers were reported to be using more tapioca flour from Brazil. Shipments from Brazil were said to be moving direct to paper producers in the north. No new prices were noted, and offers were quite liberal. Trading in Siamese and Japanese material was still reported quiet. Brazilian top quality material was firm at 6¼c. per pound, carlots, exdock, for prompt shipment. Consumer demand for Siamese grades was limited at 6½c. per pound, carlots, exdock, and medium at 5.90c., same basis. Javanese maintained its previous listing of 6.10c. to 6.15c. per pound, carlots, exdock.

Tanning Materials

Chestnut Extract—Trading was restricted to actual requirements. Market was quotably unchanged. Business in some quarters was reported to be spotty. Liquid 25 percent tannin was quoted at 4c. per pound, tankcars, f.o.b. works; 4¾c. per pound, barrels, carlots, and 5.10c. barrels, less carlots; powdered 60 percent tannin, 10.32c. per pound, bags, carlots, and 11.02c. bags, less carlots; same basis.

Cutch—Market remained steady. Trading was more active on the basis of 8½c. per pound, ex dock.

Mangrove Bark—Business continued inactive. African bark for prompt shipment was quoted at $68.50 per ton, exdock. Colombian at $58 per ton, and Ecuador, $55, same basis.

Myrobalans—This market was firm, due to limited offerings for shipment, according to trade sources. Assorted JI's were quoted at $66 per ton, exdock, for prompt shipment. Crushed listed at $78 to $80, and Bombay, $60, same basis. Solid extract was maintained at 7¾c. per pound, exdock, plus duty.

Quebracho Extract—While trading was restricted to an occasional lot for prompt shipment, the primary market remained steady. Solid ordinary guaranteed 63 percent tannin was held at 11 21/32c. and clarified 64 percent at 12 23/64c. per pound, exdock, plus duty.

Valonia—Quiet demand was noted, with no prices alterations in evidence. Cups showed a range of $46 to $48, exdock. Beards were limited in supply and nominal at $66 to $68 per ton, same basis. Extract was firm at 8c. to 8¼c. per pound, exdock, plus duty.

Wattle—Buying interest continued light. Shipments were unchanged and well held. Fair average bark was quoted at $98 per ton, exdock, and merchantable at $94 per ton, same basis. East African extract, 60 percent tannin, was quoted at 9¾c. per pound exdock, plus duty, and South African at 10c. per pound, same basis.

For Late Market Developments, See Page 4

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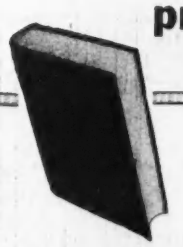

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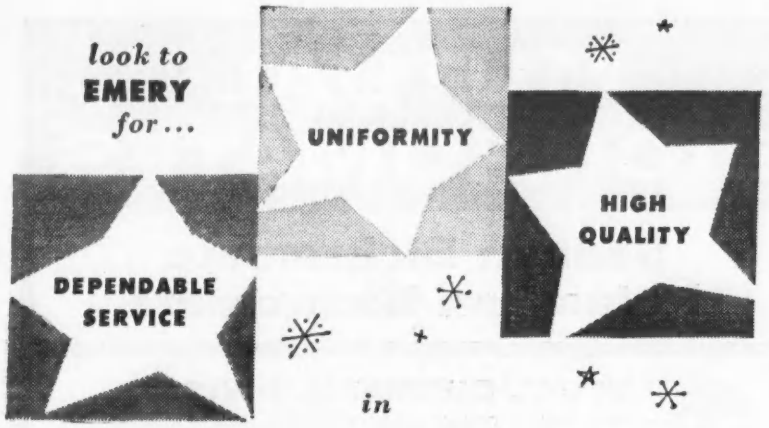

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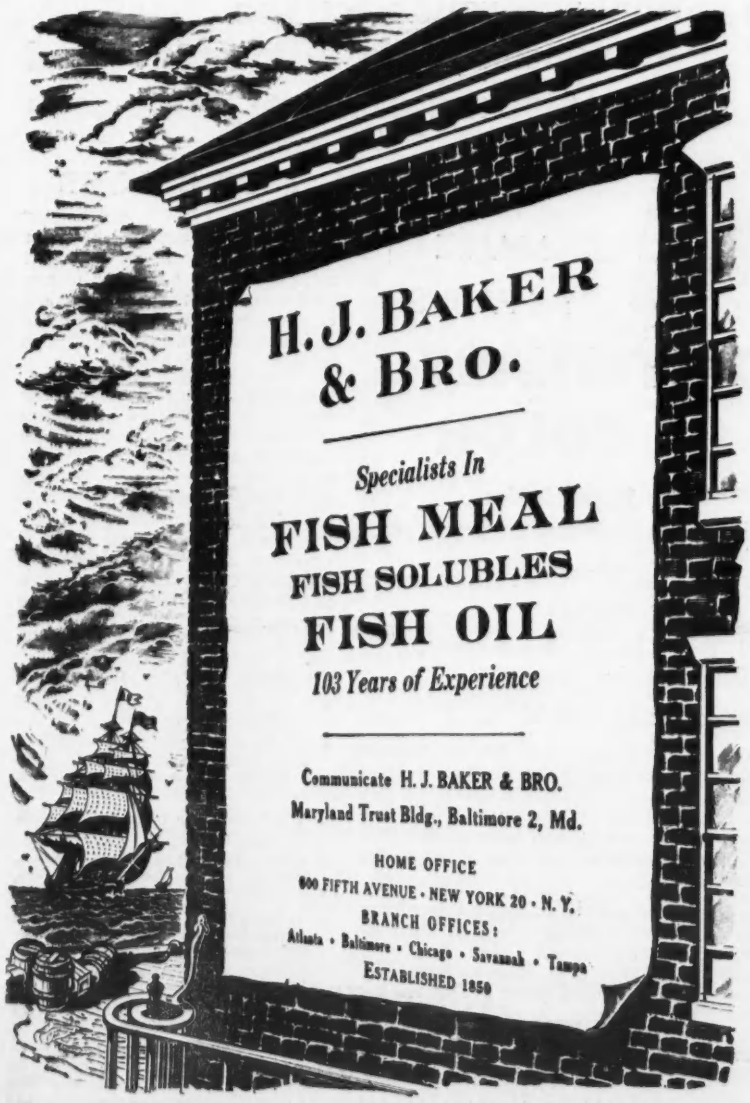

Oils, Fats and Waxes

Firmness of crude cottonseed oil continued to feature the edible oil group. Offers from mills were limited and refiners had to raise bids fractionally for nearby delivery. Soybean oil remained steady with fair volume of sales noted at unchanged quotations. Corn oil also was maintained at current levels. Peanut oil was scarce and nominal.

Crude coconut oil was inactive and slightly lower, as was copra. Denatured palm kernel oil also was easier with coconut.

A firm tone prevailed in tallow and greases, despite limited trading. Domestic buyers were reported in the market at slightly lower levels, but offerings were light and well held. Export inquiry was reported fairly active, though actual trading continued slow. Lard was unsettled and fractionally lower.

Processors raised the price of linseed oil as a result of the advance in flaxseed. Consumers continued to take sizable lots of oil against contracts, but showed little interest in later requirements. Wider price differential between linseed and oiticica oils has increased substitution of latter for linseed. Tung oil was steady, with fair volume of business reported at unchanged prices. Consuming demand for refined fish oils has improved for prompt needs.

Trading in oilmeals continued spotty. Soybean meal was reported inactive and nominal. Cottonseed meal was higher due to improved export business. Linseed meal was in fair request for nearby delivery and steady.

In vegetable waxes, beeswax continued the firmest on the list due to the high cost and scarcity of crude grades. Refined grades were lifted 1 cent per pound. Consigned stocks of carnauba wax continued to depress the local market, and quotations were unsettled and nominal. The Brazilian market was about 2 cents higher than available stocks on spot.

Price Trends

Advanced

Acid, linseed fatty, 1 5c. per lb.
Cottonseed meal, $1 per ton.
Oil, cottonseed, crude, ⅛c. per lb.
Linseed, 1 5c. per lb.
Wax, bees, refd., 1c. per lb.

Reduced

Copra, $5 per ton.
Lard, cash, ¼c. per lb.
Oil, coconut, crude, ⅜c. per lb.
Palm kernel, ¼c. per lb.
Wax, carnauba, Ceara, refd., 1c. per lb.
Chalky, 2c. per lb.
Parnahyba, crude, 2c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 14, 1954
104.64	**104.94**	**106.69**	**116.70**

(For Current Prices see Page 9)

Vegetable Oils

Castor—Business was reported spotty and confined to prompt requirements No. 1 Brazilian was unchanged and steady at 12½c. per pound, tankcars, New York, prompt delivery.

Coconut—Crude was easier and offered at 11c. per pound, tankcars, f.o.b. Pacific coast, May shipment, and 10⅞c. June. Tankcars at New York were nominal at 12¼c. per pound, prompt and later delivery.

Corn—Offers of crude were light and well held at 14c. per pound, tankcars, tankcars, f.o.b. with trading thereat. Refined was maintained at 17½c. per pound, tankcars, New York, basis.

Cottonseed—Bleachable cottonseed oil futures continued to display a steady tone last week reflecting the firmness of crude. Trading declined sharply, but price fluctuations were narrow and market closed about unchanged for the week. Buying interest was less aggressive but selling pressure also was lacking. Trade interests absorbed May, but sold July on the bulges. May tenders were increased to 40 contracts. Consuming demand was reported quiet. Refined salad oil was unchanged at 17¼c. per pound, tankcars, New York basis, prompt delivery.

Offers of crude oil continued scarce and quotations were fractionally higher. Sales were reported at 13⅝c. per pound and bid tankcars, f.o.b. mills in the Valley and 13¼c. and 13⅜c., in Texas, according to location; 13⅞c., nominal in the Southeast. The government offered 60 tankcars of crude oil, f.o.b. mills, Arizona. Bids must be submitted by May 17. Sales of 6 tankcars were reported at 12.61c. per pound, tankcars, mill origin for export to Canada.

Cottonseed production for 1954 was indicated at 5,702,000 tons, compared with 6,748,000 in 1953 and 10-year average of 5,054,000 tons. The 1954 season average price received by farmers was $60.30 per ton, against $52.70 per ton in 1953. Combined value of lint and cottonseed in 1954 totaled $2,645,000,000, 12 percent less than $3,010,000,000 for 1953, according to the Crop Reporting Board.

Department of Agriculture has announced a purchase authorization to the Government of Israel to finance the purchase of up to $752,000 worth of cottonseed oil, c.&f. Israel port (s), also funds to finance ocean transportation of the cottonseed oil on U. S.-flag vessels.

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended May 13 follow:—

	Sales	Cents per pound High	Low	Close
May	62	15.60	15.45	15.57S
July	72	15.49	15.34	15.46@15.47
September	1	14.58	14.58	14.60@14.68
October	6	14.25	14.21	14.23@14.27
January	5	14.15	14.08	14.13@14.20

Total sales, 146 contracts.

Memphis—Crude cottonseed oil was bid 13⅝c. per pound, tankcars, Valley. Trading moderate. Cottonseed meal quoted $61.50 per ton, sacked, Memphis; hulls, $14 per ton, bulk and $18, sacked. Export business improved, domestic demand fair.

Linseed—Higher flaxseed, which advanced 5c. per bushel, stiffened the oil market. Quotations were lifted 1/5c. per pound, raw oil was quoted at 13c. per pound, tankcars, Minneapolis, May forward delivery and 13.2 exwarehouse. New business was still restricted to actual needs, while demand for delivery against current contracts continued active.

Minneapolis—Advancing flaxseed costs and a slow linseed meal demand forced linseed oil prices 2/10ths of a cent a pound higher last week. Raw oil in tankcars rose to 13c. a pound, f.o.b., Minneapolis; warehouse basing price, 13.2c. Business was slack as buyers held to the sidelines. Most users were comfortably booked, having purchased oil at lower levels earlier this year. Shipping specifications, meanwhile, were brisk and much heavier than at this time last year.

Shipments of linseed oil, in pounds, were as follows:

	1954-55	1953-54
Past week	7,140,000	5,760,000
Since Sept. 1	271,400,000	218,040,000

Flaxseed—Market was stronger. Cash seed advanced 5c. per bushel.

Minneapolis—Bids on spot and to-arrive cash flaxseed rose 5c. a bushel the past week, climbing to $3.30, Minneapolis basis. Bookings were light amounting to only a couple of spot cars and 15 cars and about 20,000 bushels in trucklots and oddlots on a to-arrive basis. Arrivals of flaxseed at Minneapolis totaled 80 cars, compared to 66 cars the previous week and 77 cars a year ago. Shipments from Minneapolis totaled 30 cars as against 27 cars the preceding week and 12 cars in the corresponding week last year.

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts 1954-55	1953-54	Shipments 1954-55	1953-54
Past week	152,250	141,750	42,000	21,000
Since Sept. 1	20,390,250	15,883,900	4,692,000	3,207,650

Oiticica—Trading was light and spotty. Prices were steady at 12c. to 12¼c. per pound, tankcars, New York, prompt and later delivery. Drums were maintained at 13½c. to 14c. per pound, spot depending upon quantity.

Olive — Trading was reported spotty, and confined to actual needs. Prices were without change, but shadeable for sizable lots. Spanish oil was quoted at $2.30 to $2.40 per gallon, drums, spot, duty paid as to quantity and Tunisian, $2.15 to $2.20 per gallon, same basis. Primary markets were quiet, but steady.

Palm—Trading was light, chiefly for immediate delivery. Drums were unchanged at 12¾c. to 13¼c. per pound, spot and 11¼c., tankcars, prompt delivery.

Palm Kernel—This market was easier and off fractionally. Denatured oil was quoted at 12c. per pound, tankcars, New York, prompt delivery.

Peanut—With crude scarce, the market was quiet and entirely nominal at 18c. per pound, tankcars, mills, southeast. Refined oil was quiet but steady at 21c. per pound, tankcars, New York basis.

Rapseed — Buying interest was slow.

For Late Market Developments, See Page 4

Refined was unchanged at 16c. per pound, tankcars, New York, May-June and 15¾c., July forward.

Soybean—Trading in crude was slow. Market was irregular, but closed steady and unchanged. Sales were reported at 11⅞c. per pound, tankcars, Decatur, spot. Scattered May was 11¾c. bid; first half June was quoted at 11¾c.; scattered June, 11½c. and scattered July at 11¼c., same basis. Refined salad was held at 14⅞c. per pound, tankcars, New York, prompt delivery.

Closing prices of crude soybean oil futures on the N. Y. Produce Exhange in tankcars (60,000 pounds) for the week ended May 13 follow:—

	Sales	Cents per pound High	Low	Close
May	39	12.01	11.75	11.76@11.80
July	17	11.44	11.20	11.22@11.30
September	1	10.85	10.85	10.74@10.82
October	6	10.58	10.30	10.45@10.52
December	4	10.36	10.30	10.29@10.36
January	1	10.40	10.40	10.28 Nominal
March	1	10.45	10.45	10.29@10.32

Total sales, 69 contracts.

Tung—While trading was spotty, the market ruled steady at unchanged quotations. Imported oil was maintained at 23⅜c. to 23½c. per pound, tankcars, New York, prompt delivery. Drums were well held at 24⅞c. to 25¼c. per pound, same basis. Domestic oil was quoted at 22⅜c. to 22½c. per pound, tankcars, f.o.b. mills.

CCC sold 4½ tankcars of tung oil last week at 22c. per pound, tankcars, Bogalusa and Avondale, La. and 23c. Cleveland, Philadelphia and Carnegie, Pa.

Miscellaneous

Castor Beans—Shipments were more or less at $105 to $110 per ton, c. and f. New York.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:—

	Pounds Beans	Oil
Last week	2.314.050	2.052.000
Previous week	39.420	2.374.000
Corresponding week, 1954	8.819.250	922.000
Total this year	43.431.365	31.460.000
Corresponding period, 1954	34.562.000	13.928.000

Cocoa Butter—Market was irregular and unchanged at 58c. to 64c. per pound, spot as to quantity.

Copra—Trading was inactive. Prompt shipment was slightly lower at $152 per ton, c.i.f. Pacific coast.

Los Angeles—Buying interest continued light during the week with sales confined to actual requirements.

Following were tankcar prices, f.o.b. Los Angeles, unless otherwise designated:

Castor, No. 1—19c per pound, l.c.l., drums included; No. 3—16¾c. per pound, same basis. Dehydrated, bodied—23.6c. per pound, same basis. Dehydrated, unbodied—22.1c. per pound, same basis. Coconut, crude—11⅛c. per pound; 10⅞c. June. Corn, crude—14c. per pound; refined—18c. per pound. Cottonseed, crude—13½c. per pound, California; 13¼c. per pound Texas; 13¼c. per pound Valley; refined 16⅜c. per pound. Linseed—14.1c. per pound, May-June. Peanut, crude—18c. per pound, f.o.b. mill, Southwest; refined—21½c. per pound, f.o.b. Los Angeles. Soybean, crude—11⅞c. per pound; refined—15½c. per pound. Refined—15½c. per pound. Tung—22⅜c. per pound, nominal, f.o.b. New York.

Fats and Greases

Greases—Buying interest for domestic needs was moderate, while export inquiry was slow. Market remained on a steady basis. Yellow was quoted at 6⅜c. to 6½c. per pound, tankcars, delivered; choice white, all hog, 8¼c.; not all hog, 7¾c.; house was nominal at 6½c. and brown, 5⅜c., same basis.

Lard — Cash lard was irregular and slightly lower. Drums were quoted at 12¼c. per pound, Chicago. Trading was reported slow.

Oleo Oil — Increased demand reduced stocks appreciably, giving the market a firmer tone. Extra was nominal at 15¾c. to 16c. per pound, drums, as to quantity and seller. Oleo stearine was maintained at 11¼c. to 11½c. per pound, barrels, same basis.

Tallow—Conditions in this market remained steady, despite limited trading. Offerings were light and closely held. Export business was reported slow. Bleachable fancy was quoted at 7¼c. to 7⅜c. per pound, tankcars, delivered; extra, 7c.; special, 6¾c.; No. 1, 6⅜c. and edible, 10¾c., same basis.

Fish Oils

Cod—This market was quiet, but steady, reflecting the firmness of replacements. Offers for shipment were light and maintained at 10¼c. per pound, drums, exdock. Small lots on spot were held at 11c. per pound, drums, exwarehouse.

Refined Fish—Consuming inquiry was more active, with users taking larger quantities for prompt delivery. Light pressed oil was unchanged at 10c. per pound, tankcars, New York basis. Offers of new crop menhaden oil continued light. Tankcars were quoted at 7¾c. per pound, f.a.s., Atlantic and Gulf ports, against bids of ¼c. less for export and at 7½c. per pound, works, Atlantic coast, with buyers ideas around 7c.

Los Angeles—After a dormant market for several weeks, four cars of summer crude tuna oil reported traded at 6c. per pound, f.o.b. San Pedro; prompt oil bid 6c., same basis. Resale crude sardine oil was still offered at 9c. per pound, f.o.b. San Pedro with no buying interest. New crop menhaden oil quotations at Gulf were unchanged at 6¾c. per pound.

Fatty Acids

Good consuming demand was noted for most grades. Market conditions remain steady. Oleic, stearic and tallow acids were maintained at prevailing quotations. Trading in vegetable acids also was quite active. All varieties were quotably unchanged and firm, reflecting the strength of basic oils.

Cake and Meal

Cottonseed Meal—Buying interest continued for small lots. The government continued to offer relatively small tonnage of meal each week. Present prices have encouraged some export interest. Few mills have any tonnage for shipment. Sacked meal forty-one percent was offered at $61 per ton Memphis; $62, Ala-

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4041 P39—Abbe Porcelain Lined Pebble Mill; 32"x32"
3745C—Two Patterson Buhrstone Line Pebble Mills; 6'x5' and 6'x8' complete with pebbles
M3-M101—Steel Ball Mill; 20"x44" with 3 HP motor
3693—Steel Ball Mill, 34"x38"
3443—International 8'x8' Porc. Lnd. Pebble Mills; 50 HP Gearmotors
3789—Patterson Pebble Mills from 20"x30" to 6'x8'
M3-206—Abbe Steel Mill; 4½'x3'
3564—Abbe 50 gal. Porc. Lined Pebble Mill; 20"x30"
3800—Hardinge Conical Ball Mill with Titanite Liners; 10'x48" with scoop feed and accessories
M14-D2—Patterson 5'x6' Jacketed DJ Ball Mill; Chrome Manganese lined; 25 HP motor
M3-B100—Patterson 5'x16' Jacketed Ball Mill; Chrome Manganese lined; 100 HP motor
M3-202—Patterson Byerlite Lined Ball Mill; 6'x8'; 50 HP
4147 C9-10—Two Smidth Tube Mills 5'5"x20'; V belt drive
4147 C3-6—Four Gates Tube Mills; 5'x22'
3655 W2—Gruendler Supermaster No. 1 Hammer Mill; 15 HP
4082 A1—Mikro Pulverizer Model 2 S1 Bronze Chamber; PD
M10 D200—Mikro No. 2 SP Pulverizer; 10 HP with 2 HP Pre Crusher
3331—Mikro No. 2 TH screw feed with Pre-Breaker
3324 E2—Mikro No. 4 F Pulverizer; 15"x24"
McA1501—Mikro No. 2 Type SCB chamber 7"x 11½"; arr. for motor drive
3868N-1—Fitzpatrick Model D Stainless Comminutator; cooling jacket
M10-202—Fitzpatrick Model K Comminutator with 20 HP motor
3705 L3—Fitzpatrick Homoloid Pulverizer; motorized
1001 N1—Williams Model NF Hammer Mill; 25"x14"; requires 60 HP.
3429 A7—Williams Hammer Mill 36"x18"; requires 60 HP
3429 A-5-6—Williams Hammer Mill No. 4 18"x 48" requires 60 HP
4147 C14—Williams No. 6 Hammer Mill; 42"x 48"; V belt
M10-404—Stedman Type A Swing Hammer Mill; 24"x20"; 75 HP
M10-401—Prater Pulverizer Type DS 6 with 30 HP motor
3769—Jay Bee Model 2U Hammer Mill; 10¾"x 14" requires 20 HP
3429 A8—Gruendler Pulverizer 12"x48" requires 150 HP motor
3192 A1—Gruendler Pulverizer No. 3 chamber 8"x16"
3429 A9—Gump Bar Nun No. 40 Hammer Mill; 12"x40"; requires 60 HP
3545—Jay Bee Model A4 chamber 12"x18" with 25 HP motor
M10-183—Jeffrey Swing Hammer Mill Type E 42"x36" for 100 HP motor
M10-191—Stedman Type BX 20"x12" Swing Hammer Mill; 40 HP motor
M10-190—Riley Duplex Attritor requires 250 H.P. motor
3277—Robinson 26" Double Runner Attrition Mill; two 10 H.P. motors
3529W—Bauer 24" Double Runner Attrition Mill with two 20 HP motors
3120—American Ring Roll Crusher; 30"x33" throat; 50 HP
4041 P49—Sturtevant Rotary Fine Crusher, Model "00"; 3,000 tons per hr.
4147 C13—McCully No. 10 Crusher; Belt & P.D.
3315 E2—Williams Ring Roll Mill; ring 3"x10"; with 3 rollers 4" dia. arranged for motor drive
3293 N1—Raymond Imp Mill 9"x18" with accessories
2383—Raymond Model No. 00 Aut. Pulverizer with accessories
3853-S—Raymond No. 50 Stainless Imp Mill with 50 H.P. motor
M10-400—Raymond No. 40 Stainless Imp. Mill; 40 HP
4066G—Raymond No. 47 Imp. Mills; 50 HP motor
4062 K2-5—Four Raymond No. 32 Imp. Mills; 20 HP motors
MWK-1—Sprout Waldron Roller Mill 1 pair high; 9"x18"; 10 H.P.
JR-1—Allis Chalmers Flaking Mill 20"x24" with 25 H.P. motor
4041 P43-44—Two Robinson Unique 4 Roll Mills; 7"x24"; 20 HP
4042 K3—Sprout Waldron 2 Pair High Roller Mill; 9'x18"; 10 HP
3623 D2—Munson Rotary Cutter Size "0" 3½"x 11" feed opening
M10-403—Rietz Disintegrator Model RD8 with 5 HP motor
M10-404—Rietz Disintegrator Model RD12 with 20 HP motor
M10-402—Mitts Merril No. 14 Shredder; motorized

CENTRIFUGALS

4041 P48—A. T. & M. 12" Stainless Suspended Type Centrifuge
3615—G1—Tolhurst 48" Overdriven; perforated Basket; Rubber cov. 10 HP.
1152 Mc—Bird 48" Rubber Cov. Extractor; with 40 HP 2 speed motor
1152 Mc1—Bird 12" Rubber Lined Centrifuge with extra Imperforate Basket
C5-136—Fletcher 40" Steel Solid Bowl Centrifugal; 20 HP motor
C4-500—Tolhurst 20" Stainless Extractor; Perforated Basket; under driven
C5-191—Tolhurst 26" Suspended with Plow and Scraper; two speed motor
2945 M4—Tolhurst 40" Overdriven; self balancing with Copper Basket, perforated; 7½ HP motor
C4-121—A. T. & M. type 316 S/S Vacuum & Pressure Hoods, 60"; link suspended; 15 HP 2 speed motor
C5-200—A. T. & M. 40" Stainless Suspended Type Centrifugals; bottom drum; with 40 H.P. motor
C6-201—Three Podbielnik Centrifugal Counter Current Solvent Extractors; 100 PSI seal pressure; 32"x37"x54" overall
C5-205—A. T. & M. 42" Suspended Centrifuge; Perforated Basket; 40 HP
4042/K1—A. T. & M. Stainless Suspended Centrifuge; 30"x15"; 20 HP

EVAPORATORS—VACUUM PANS

SPECIAL:—Zaremba Double Effect INCONEL Evaporator with calandria; 430 sq. ft. of surface; with accessories; print available
3274—Swenson Quadruple Effect Long Tube Evaporator; film type
3475—Zaremba Single Cast Iron Evaporator; 130 sq. ft. Copper tubes
E12-101—Buflovak Stainless Forced circulation Evaporator with Condenser, calandria, jet ejector, etc. ; 100 sq. ft. Print Available
2895—Devine Single Cast Iron Calandria type; 28"x8'
3515—Acme 1600 Gal. Copper 6'x10', coils, barometric condenser, etc.
3557—Croll Reynolds Vac. Evaporator; 30"x5' MONEL with accessories
3670—Copper Vac. Evaporator; 66"x73" coils, heat exchanger
E12-300—Copper Single Effect Calandria Evaporator; 10'x16' with 1640 sq. ft. surface area
487—Zahn & Nagel Continuous Evaporator; 2500 lbs. per hour
E12-161—Buflovak Double Effect Evap. C.I. with copper steam chest, Barometric Condenser, etc., 75 and 100 sq. ft. each
3497 S7—Jacketed Crystallizing Evaporators; 24"x21"x12' long
E 12-200—Buffalo Monel Evaporator, 290 sq. ft.
3340—Brand NEW Stainless Steel Kettles good for 100± always in New York stock; sizes up to 500 gal. immediately
3926—Stainless Clad 80 gal. steam jacketed Kettles; 40±
4041 P35—Four Glass Lined 100 Gal. 31"x36" Jktd. Kettles
4041 P46-47—Two Stainless Jacketed & Agitated Pasteurizing Kettles; 46"x30"
3444—Pfaudler Glass Lined Jktd. 350 Gal. Kettle 54"x36"; agitated
3750 FRF—Pfaudler 1000 Gal. Glass Lined Reactor Type XL 66"x66" with 5 HP motor
3597—Special Lot of Copper Jacketed Kettles from 10 gal. to 250 gal.
3218—5200 Gal. Steel Jacketed Closed Top Kettles; 9'6"x9'10½"
3247—Aluminum Steam Jacketed Kettles from 25 gal. to 250 gal.
9908 H3—Aluminum Vacuum Pan 250 Gal. 40"x 60"; Jacketed

REACTORS

3424 K4—Stainless Reactor; with coils agitated; 24"x48"
3824S-12—Pfaudler Glass Lined Jacketed Agitated Reactor; 12"x12"
3824S-14—Pfaudler Glass Lined Jacketed Reactor; 36"x36"
3673 L9—Pfaudler Glass Lined Jktd. Reactor; 16"x28"
3670—Steel Reactor 4'x4' heated with copper coil unit
3944 B2—Steel Jacketed and Agitated Reactor; 315 Gal.; 44"x48"
3168—Stainless 500 Gal. Jacketed Reactor; 6' dia. x 30" straight side
3168 D7—Dopploy Jacketed Reactor
3390—Buffalo 500 Gal. New Jktd. Agtd. Reactor; 4'x5'2" motorized
3544—Pfaudler Glass Lined Reactor; 400 Gal. Type EL; 4'x4'; steam Jacketed
3434—Dopp 650 Gal. Cast Iron Full Jktd. Agitated Reactor; 80"x67"
3994 K5—Monel Reactor 785 gal. 5'x5'; Jktd.; Agtd.
3934 C41—Steel Reactor; 950 Gal. 5'x5'6"; agitated; coil heated
4113 D1-2—Two Struthers Wells Stainless Vacuum Pans, 5'x12'8" high with Calandria section 350 SS 2" tubes; 630 sq. ft. 200 PSI
R4 503—Lead Lined Reactor; 1000 Gal. 4'x6'; Jktd. ASME 50 PSI
R4-500—Lead Lined Reactor; 1850 Gal. 6'6"x 6'6"; Jacketed and agitated 10 HP motor
3113 E2—Copper Vacuum Pan; coil heated; 2000 Gal. 7' diameter
3799V-1—Lancaster Stainless Lined Rotary Reactor; Jktd.; 50"x17'4" 300 PSI internal
3870M-2—Mojonnier Stainless Vacuum Pan, 3'x10'
3434—Dopp 650 Gal. Cast Iron Jacketed and Agitated Reactor
R4-530—Stainless Resin Kettle; 500 Gal. with Condenser and agitator
R4-311—Aluminum Pressure Vessel 800 Gal. 51"x98" Jacketed
3934 C8—Bethiehem Reactor 1400 Gal. Steam Coils Cast in shell
R4 505—Devine 1500 Gal. Vertical Nitrating Kettle; 6'x8'6"; Jktd.
R4 507—Dowtherm Jktd. Stainless Agtd. Kettle; 2500 Gal. with accessories
3598—2600 Gal. Steel Jktd. Agitated Pressure Vessel

COLUMNS AND STILLS

3984R—Stainless Steel Columns; 8"x10' and 12"x15'
C13-200—Stainless Steel Generating Column; 48"x31' high flanged and bolted sections
3476—Copper Jacketed Still Pot; 28"x25" with condenser
3659 R3—Aluminum Bubble Cap Column; 27½" x36'; 60 plate
C13-140—Stokes Copper Bubble Cap Column; 36"x18'
C14-141—Stainless Packed Column; 24"x14' insulated
C14-220—Stainless Packed Column; Raschig rings; 4"x10' with Still Pot
C-13-162—Steel Bubble Cap Column; 48"x37' high with accessories
C14-151—Solvent Recovery Absorber; 8'x28' with accessories
C14-153—Gas Saturating Tower; 8'x36'6"; 5 PSI
C13-201—Copper Distillation Column; 24"x15'; 16 bell plates
9908 H3—Aluminum Steam Jacketed Vacuum Still; 40"x60"
E13-161—Harris Stainless Vac. Still with S/S coils; 6'x30'9" with accessories
E13-162—Nickel Clad Evaporating Still; 6'6"x10'
3470—Stainless Steel Bubble Cap Column; 16 sections; 8⅜"x19' high

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bama, and $65 Georgia and South Carolina mills, May shipment.

Linseed Meal—Market was firmer, with flaxseed. Trading continued slow.

Minneapolis—Higher flaxseed costs forced linseed meal prices 50c. to $1 a ton higher last week. Extracted linseed meal was priced at $55.50 to $56 a ton, bulk, carlots, f.o.b., Minneapolis. Expeller meal drew a premium of $4 a ton over extracted. Shipping specifications were excellent.

Shipments of meal, in pounds, were as follows:

	1954-55	1953-54
Past week	10,320,000	6,000,000
Since Sept. 1	496,140,000	501,190,000

Soybean Meal—Trading was reported slow. Some processors have curtailed operations. Feed manufacturers continued to buy on a hand-to-mouth basis, even though it is regarded as cheap in price. Supplies at the mills do not seem to be burdensome but supplies of beans yet to be processed are more than normal. Meal forty-four percent unrestricted was available at $54 per ton bulk for May; $53.50 June-September, basis Decatur and $59 Mississippi Valley points, bulk May shipment.

Waxes

Beeswax—This market was strong, reflecting the high cost and scarcity of crude grades. African crude was unavailable on spot and for immediate shipments, and quoted nominally at 65c. per pound for later delivery. Chilean and Brazilian waxes also were scarce and nominal. Refined grades were firmer and lifted 1c. per pound in some quarters.

Carnauba — Consigned wax continued to depress this market, though it was reported that offerings were materially reduced. Buying interest was more active, but actual sales were still limited to actual needs. No. 3 Parahyba crude was lower and quoted at 62c. to 64c. per pound, spot as to seller, while No. 3 Ceara was merely nominal at 60c. to 62c., same basis. Refined Ceara grades were off 1c. per pound. Chalky also was easier, ranging from 56c. to 58c. per pound, according to seller. Yellows were steady and unchanged.

Japan—Demand was restricted to small lots for immediate delivery. Spot stocks were available at 41c. to 43c. per pound, as to quantity.

Ouricury—Trading was more active, reducing stocks that were depressing the market. Market tone was firmer, though prices remained unchanged. Pure refined was quoted at 90c. to 92c. per pound and technical at 85c. to 87c. per pound, depending upon quality and quantity.

Pharmacy Seen Needing

—Continued from page 7

the Drug and Pharmaceutical Field," Howard A. Trumbull, president of the National Family Opinion, Inc., said that the results show the public feels the industry is beyond reproach.

Dr. Linwood F. Tice, president of the American Association of Colleges of Pharmacy and assistant dean of Philadelphia College of Pharmacy and Science, in a paper on "Education, Too, Must Progress" discussing the enactment by the AACP last year of a required five-year pharmacy course by 1960 made the following points:—

● "Not a single member of the committee on curriculum of the AACP, after years of effort, has been able to develop a well-integrated four-year curriculum. Neither has it been possible when tried by experts in from the outside.

● "A more broad and liberal training is the primary objective of the advance in pharmaceutical education which we are planning and which we shall put in effect.

● "Educators must keep constantly in mind that they are training pharmacists not for today but for practice in the year 1980, 1990 and even in the year 2000."

Allan J. Greene, director of commercial development for Chas. Pfizer & Co., Brooklyn, N. Y., noted that "the urge to develop and market new and better products is the driving force behind the pharmaceutical manufacturing industry today."

Discussing problems faced in developing and marketing the innovations, Mr. Greene noted that product obsolescence was a bigger problem than ever before and that patent disregarding by certain firms was also important. He declared, "This is a very basic problem in the pharmaceutical industry in the United States today, and I believe that progress in the field of research and conquest of disease is going to depend, in large measure, on how the patent problem is resolved."

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2—Hersey 4'x30', 3'x20' S.S. Hot Air Rotary.
3—Struthers-Wells 5'x15' nickel Rotary Vacs.
1—Devine 2'x4' Vacuum Drum, 316 S.S.
1—Stokes 138H Vacuum Shelf with 10—44"x40" shelves.
1—Devine double door Vacuum Shelf with 17—59"x78" shelves.
2—Stokes Rotary Vac. 3'x15', 30"x8'.
1—Devine Rotating Vacuum 5'x10'.
3—Rotary Dryers 5'x30', 5'x40', 4½'x50'.

MIXERS

3—Baker Perkins 100, 50 gal. double arm, jacketed.
1—Day #30 Imperial double arm, 75 gals.
7—Sprout Waldron S.S. jacketed, Powder, 67, 27 and 10 cu. ft.
1—Struthers-Wells 6'x9' S.S. Rotating, jacketed.

MILLS

1—Patterson 3½'x4' jacketed, steel Ball Mill.
5—Mikro Pulverizers #4TH, #3TH, #2TH, #2DH.
1—Hardinge 6'x22', Conical, steel lined.
3—National 10"x20", 6"x12" Two-Roll Mills with motors.

CENTRIFUGES

1—Sharples PN14 Super-D-Canter, 316 S.S.
1—DeLaval AC-VO continuous 304 S.S.
2—Sharples C-20, C-27, Super-D-Hydrators, 316 S.S.
2—Bird 18"x28" solid bowl, continuous, 310 S.S.
3—Sharples P16 Monel and S.S. Pressurtite Super Centrifuges.
1—AT&M 40" Suspended, 347 S.S., perforated basket, TEFC motor.
3—Tolhurst 40", 32", Suspended, steel, perforated basket, M.D.
1—Bird 40" Suspended, rubber covered, imperforate basket, M.D.
1—AT&M 36" center-slung, rubber covered, perforated basket.

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2—Pfaudler 200 and 100 gal. glass lined, jacketed, agitated.
1—Buflovak 800 gal., 347 S.S., jacketed, agitated.
1—Blaw Knox 3000 gal., 304 S.S. Reactor.
1—7'x25' 6" S.S. Tower.
10—715, 458, 357, 108 sq. ft. Atmospheric S.S. Tubular Heat Exchangers.
3—2400 sq. ft. Admiralty Tube Heat Exchangers.
3—50 to 350 sq. ft. S.S. Tubular Heat Exchangers.

FILTERS

2—Oliver 8'x10' Monel Rotary Vacuum.
1—Oliver 8'x6' S.S. Rotary Vacuum, UNUSED.
2—Oliver steel 5'3"x6' Rotary Vacuum.
1—Niagara 110-20 Filter with 12 S.S. leaves.
2—#3 Sweetland S.S. Filters with 12—25" dia. leaves 75 sq. ft.
2—#5, #7 Sweetland Filters with 15 and 27 leaves.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

MISCELLANEOUS

4—Orville Simpson Rotex Sifters 40"x120", 40"x84", 20"x81".
2—Stokes #DD2 and #D3 Rotary Tablet Machines.
6—Nash vacuum pumps H8, H7, H6, #4.
7—Durco S.S. centrifugal pumps 1" to 3".

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2—Stainless Steel Tanks T316, 4000 & 1000 gal., 5/16" thick.

4—Copper Bubble Cap Distillation Towers—66" dia. x 27 plate; 48" dia. x 40 plate; 60"—48" dia. x 27 plate; 48"—30" dia. x 44 plate.

22—Ross and Patterson Shell and Tube Condensers and Heat Exchangers, Copper tubes — from 69 to 1320 sq. ft. pressure type.

25—Taber & Ing-Rand Bronze Centrifugal Pumps with motor.

Lot Copper and Brass piping, fittings, etc.

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1—Penna. Ring type Granulator, Trojan K3-24, 18" x 36" hopper opening, 40 HP motor.

3—Rotoclone size 20, type W. Exhausters and Dust Collectors, 40 HP motor.

2—Fuller-Kinyon Pumps, 6" type E.

1—Steel Bucket Elevator, 81' H, 16" x 16" x 8" buckets.

1—Drag Conveyor, 8" x 16" x 65'

Lithopone Mfg. Plant

1—Traylor Rotary Kiln, 10'6" D x 105' L x ¾" welded shell.

3—Rotary Chrome Nickel Alloy Furnace Tubes, 24" dia. x 8'6" L.

1—Allis Ch. Contin. Steel Ball Mill, 6' D x 16' L.

3—Pebble Mills, Contin., 4'6" D x 12' L.

2—Charlotte #50 Colloid Mills.

1—Humbolt Colloid Mill, Jacketed, 50 HP.

1—Bird 36 x 50 Solid Bowl Centrifuge.

1—Sperry 30" C.I. P&F Filter, 46 ch., hydr. closer, vis. cl. disch.

2—Richardson Convey-O-Weigh Scales.

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2—42" x 120" Double Drum Dryers.

4—Centrifugal Pumps with 30 HP to 50 HP motors to 1000 GPM.

1—Nash H-4 Hytor Compressor with 20 HP motor.

1—8800 gal. Horiz. Steel Pressure or Vacuum Cooker, ASME 85#, with agitator, drive, pump.

9—Copper Tanks, 2800 gal., 2300 gal., 1723 gal. cap.

1—Fitz. Model F Comminuting Mach., St. St. 25 HP.

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1—Davis Inconel Heat Exch. 195 Sq. Ft.
8—Surface Condensers & Receivers, 100 to 175 Sq. Ft.
5—Unused Pfaudler 100 Gallon Glass Lined Vacuum Receivers.
1—Carrier Atmos. 8 Truck Dryer .
8—Devine Double Dr. Vac. Shelf Dryers, 17 & 20 Shelf 59"x78".
1—Allbright-Nell 4'x9' Double Drum Dryer.
8—C.I. Filter Presses, 12" to 36".
2—Sweetland Filters, #10 & #12.
3—Sparkler Stainless Filters 8-6.
1—Glasscote 750 gal. Jack. Glass Lined Kettle 75# W.P.—Perfect Coded.
2—Pfaudler Reactors, 100 & 1000 gallon, G.L.
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3—Rotex Screens 20"x48" to 40"x120".
1—Stainless Steel Tank 2100 gal., w/coil.
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20" Tolhurst, SS, underdriven, perf. basket, 1 HP.
COLUMNS—8'x36'x⅜" steel, welded. NEW. 72"x29'8" SS 347, welded, 21 trays, 15" spacing, 40 caps/tray.
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COMPRESSORS—York 310 ton Freon Refrigeration System, complete 300 HP. NEW.
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DRYERS—30"x8' Rotary Vac., collector & condenser, 50 PSI.
5'x15' Rotary Vac., jktd., 20% nickel clad, 500 sq. ft. condenser.
5'x6' single drum, atmospheric.
FILTERS—8'x12' Feinc, steel, string disch.
8'x10' Oliver, steel & wood, agitated.
Bowser #3 Everdur tank, SS screens.
Sweetland #5, SS lined, hyd. close.
KILNS—502-20 & 604-20 Roto Louvres. 34"x16'6", 4'x20', 4'x42', 4'6"x50', 5'x24', 5'x35', 5'x40', 5'x67', 6'x60', 8'x72', 8'x125', 9'x80'.
MIXERS—#1 Simpson, Style B. 67, 27 & 10 cu. ft. SS, jkt'd., spiral & paddle.
300 gal. Baker Perkins 18-DIM, SS, double arm, tilt.
100 gal. Baker Perkins, jkt'd., double arm tilt.
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DRYER, BUFFALO — Double Drum, 32" dia. x 90". Reconditioned.
FILTER—Oliver Vacuum, S.S., 3'x4'. Complete.
FILTER—Sweetland #2 all bronze, 18 leaves.
HEAT EXCHANGERS—500 sq. ft. Carpenter 20 S.S., 240-1"x8' tubes.
MIXERS—D.A. SIGMA, Jktd. STEEL AND S.S., 2½, 50, 60, & 200 GALLON.
MIXERS—DRY POWDER—400, 600, 1,000, 1,500, 2,000 & 3,000 lb.
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Price $2,500 ea.
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Price $1,500
3—Devine single door vacuum shelf driers. 6 shelves, 9" apart. 80 square feet effective pan surface. Drawing available. Replacement cost $5,500 ea.
New. Price $2,500 ea.
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150—Pumps—steam and electric.
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1—Buflovak Jacketed Impregnating Tank 42"x52".
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1—Hardinge Conical Ball Mill, 6'x22".
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1—Manton Gaulin Stainless Homogenizer, 125 gph.
2—I&R Vacuum Pumps, 5 H.P., 60' & 100'.
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1—Kennedy-Van Saun Rotary Dryer, 4'x40'.
Davenport Rotary Steam Tube Dryer, 6'x36'.
2—Stainless Steel Steam Jacketed Readco Mixers.
1—#316 Stainless Reactor, 265 gals. cap., jacketed.
Abbe Pebble & Tube Mill, 5'x22'—Buhrstone Lined.
1—Patterson Ball Mill, porcelain lined, 12"x27".
1—Patterson Ball Mill, 42x36, jacketed.
3—Dopp Kettles with agitators, 600 gal. cap.
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2—Large Steam Jacketed Horizontal Mixers.
Robinson Pulverizer #20, with 2 motors 10 HP each.
Robinson Ribbon Type Mixer, 30"x10'—like new.
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1—#10 J. H. Day 300 gal. Sigma Blade Mixer, Jacketed.

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Devine #12 Vac. Shelf Dryer, 40"x42"
Gen. Amer. 2'x1' continuous Rotary Vac. Filter
2—Allbr. Nell 4x9 Atmos Drum Dryers.
1—Buffalo Vac. Drum Dryer, 24"x20"

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4—Tolhurst 40" Suspended Type.
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

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Gen. Amer. 2'x1' Rotary Vac. Filter.
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Sweetland & Oliver Filters.

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2500 gal. vert. agit. Jack. Steel Kettle.
1—250 gal. Lead lined Kettle.
Stainless, alum., copper, Glass lined, lead lined and steel kettles and tanks
Copper & Stainless Varnish Kettles.

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Abbe 37"x30" chrome-mang. Ball Mill.
Patterson Pebble Mills, 6'x8', 6'x5', 30"x42".
Abbe 30"x30" & 30"x36". Also Jar Mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
Sturtevant #0, 18" hinged Hammer Mill.
Schutz-O'Neill #1 & 20" Pulverizers.
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Jeffrey 18"x18" single Roll Crusher.
Buchanan 5"x12" Jaw Crusher.
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1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
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Kent 3 HP. continuous dry mixer.
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3—Day 8, 15 & 40 gal. Pony Mixers.
15—Portable Elec. Mixers, ¼ to 3 HP.
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3—Stokes and Day Powder Fillers.
Filling Machines & Labelers.
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1—Howe Mogul barrel and bag packer.
2—Worth 12"x12"x12" Vac. Pumps.
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2—8'x125' Rotary Kilns.
2—S/S Hersey Rotary Dryers 5'x26' and 6'x23'.
3—6'6"x50' D. H. Rot. Dryers, ⅝".
2—3'x50' Rotary D. H. Dryers or Coolers.
1—Buflovac 42x120, 32x120 Atmos dbl. Drum Dryers, complete; 1—American 24x36.
3—Unused #12 Sweetland FILTERS, 48 bronze monel covered bottom drainage leaves 3" c/c. Latest type.
2—54"x70" and 1—40"x60" Bird Continuous Centrifugals, S/S Solid bowls.
2—Sharples C-20 & C-27 S/S Super-D-Hydrators.
1—2TH Micropulverizer.
2—1,000 gal. Monel, jack., agit., closed kettles.
1—Buflovac 48"x40" Drum Flaker, chrome plated, s/s ends.
9—Sperry 18"x18" iron Filter Presses, 11 chambers.
1—50 gal, stainless 347 Calandria Still, agitated, sight glasses, with condenser.
1—50 gal. stainless 347 agitated Tank, M.D.
2—Link-Belt Co. ROTARY DRYERS, Roto-Louvre #502-16 Type C, 5'2" dia. 16' long with #304 S/S contact parts. #207-10, 2'7" dia. x 10' long, carbon steel construction, and all auxiliaries.
1—Day #30 Imperial jack. Mixer, 75 gal.
3—Anco 4'x9' Chilling Rolls.
5—Horiz. Dry Powder Ribbon Mixers, 4000#, 1500#, 500#.

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2—Sperry 48" filter presses—wood plate and frame—48 chambers—2 eye washing type—open delivery—*hydraulic closing* device and Worthington ¾" x 4" hydraulic MD pump.

1—Oliver 5'4" x 8' continuous filter — wood construction — with agitator and 14" x 8" MD vacuum pump type ML.

2—Wooden tanks 12' x 10'—rubber covered agitator—12 RPM through 7½ HP Philadelphia motor reducer.

2—Wooden tanks 13' x 10', same as above, except Nettco T-37 drives and TEFC motors.

1—Wooden tank 8'x6' with Philadelphia 2 HP motor reducer agitator.

1—Wooden tank 30' x 19'6" with wood agitator and Philadelphia gear reducer and 7½ HP TEFC motor.

1—Wood tank (no agitator) 20' x 18'.

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FTC Claims Authority

—Continued from page 3

of a similar proceeding if other witnesses two thousand miles off in another direction are willing to testify that they believed the word 'Universal' really indicates that the Fritter Fryer Company or the Zilch Zither Corporation made the machine in question.

Trade Mark Procedure

When the trademark people adjudicate the fact of prior use for an article, they first gave notice to the world by *Official Gazette* so that all who wish may make claims for or file interferences against the use of the word or phrase as a trademark.

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"Yet in the instant case we have overruled the Patent Commissioner's certificate and the administrative decision of the Collector of Customs, invalidating their decisions in both instances on the sole testimony of witnesses called for the prosecution, with no opportunity for any other person to challenge their statements except the defendant.

"Opinions and impressions—they blossom everywhere and, with proper selection, witnesses will always come up with the 'right answers—a dozen for the prosecution—a dozen for the defense—depending on who calls them. Under most circumstances these witnesses clutter up a record and waste the taxpayers' money with no other results than the pitting of one set of propaganda against another."

FTC Readies New Rules

—Continued from page 3

revised to specify with more particularity the contents of each complaint by the commission. Similarly, in the rule on answers, the steps available to respondents have been more clearly outlined.

The admissions rule was revised to correspond more nearly with procedures applicable in federal district courts. Another rule change now authorizes the Commission's hearing examiner to permit intervention by interested parties, which was formerly granted only by the commission.

Another change in the adjudicative rules concerns amendments and supplementary pleadings. Under the old rule, all amendments to complaints in the course of hearings had to be referred directly to the five members of the commission and were often the cause of delay. The new rule provides that amendments reasonably within the scope of the original complaint can be acted upon by the hearing examiner presiding over the reception of evidence.

In the preparation of the revised rules, the commission had the benefit of views received from bar groups and its own administrative procedure and rules committee.

The new rules of practice and procedure may be obtained by writing to the division of legal and public records, Federal Trade Commission, Washington 25, D. C.

ACS N.Y. Section Names Alvan Tenney Chairman

Dr. Alvan H. Tenney, manager of market research of Carbide & Carbon Chemicals Company, New York, a division of Union Carbide and Carbon Corporation, has been elected chairman of the American Chemical Society's New York section. Dr. Tenney will take office July 1, succeeding Dr. Warren M. Sperry, professor of biochemistry in Columbia University and head of the department of biochemistry in the New York State Psychiatric Institute.

Dr. Henry B. Haas, president of the Sugar Research Foundation, was chosen chairman-elect of the section. Prof. Arthur B. Kemper, head of the Manhattan College chemistry department, and Fisher Gaffin of the J. T. Baker Chemical Company were reelected secretary and treasurer, respectively.

Named to the section's board of directors, which includes the officers and the retiring chairman, were:—Dr. Wayne E. Kuhn, general manager of the research and technical department of Texas Company; Prof. C. G. Overberger of the Polytechnic Institute of Brooklyn, and Prof. T. Ivan Taylor of Columbia University, director at large, and J. H. Berglund of the Esso Research & Engineering Company, representing the Staten Island subsection; Dr. Frederick Leonard of Nepera Chemical Company, representing the Westchester subsection, and Dr. Nathan Weiner, assistant director of research of Endo Products, Inc., representing the Metropolitan-Long Island subsection.

FTC Settles Drum Case

—Continued from page 3

"planned common course of action" among themselves or with others to fix the prices of steel drums. The order includes any element of price, such as the base price for a "standard" drum, the extras added to or the deductions from any base price for any specified characteristics, such as heavier gauge steel than used in the standard drum, or any other condition of sale.

In addition, the order prohibits "collecting, compiling, circulating or exchanging," information concerning price factors or methods, or using such information in computing prices. Also prohibited is the practice of quoting or selling steel drums at prices determined by a system capable of:—

1) Producing identical price quotations, prices or delivered costs; 2) Establishing a fixed relationship among them; 3) Preventing purchasers from securing any price advantage by dealing with one or more of the companies.

Any individual action which knowingly contributes to the operation of a planned common course of action is included among the prohibitions. In consenting to the order, the parties neither admitted nor denied any violation of the law. They waived hearings and other procedural steps as well as their right to contest the validity of the order.

Grace Announces Plans

—Continued from page 5

diates, with potential outlets in detergents, fibers, and plastics manufacturing. New urea derivatives are also under study, he revealed.

"Through the creation of a new division devoted exclusively to research, development, and expansion," he declared, "we expect to give greater impetus to our growth."

William J. Haude will be in charge of the offices in Memphis as vice-president and general manager. Mr. Haude was formerly vice-president in charge of marketing. John G. Carriere, presently plant manager of the company's ammonia-urea plant located near Memphis, has been named vice-president and plant manager. Greater operating efficiency was cited by Mr. Grace as the reason for the move to Memphis. Expansion and additions to the Memphis plant are under study, he also revealed.

More than 50 percent of W. R. Grace & Co.'s net fixed assets are now invested in the chemical manufacturing and processing industries, as compared with less than 3 percent in 1950, it was pointed out.

Plastics Society Position to Lawton

The Society of the Plastics Industry has announced that the chairman of the newly formed vinyl film end-product standards committee is Theodore S. Lawton, sales manager for film and sheeting of Monsanto Chemical Company. A general meeting of the committee will be held on May 19 at the Pierre hotel, New York, to discuss the score of its activity and the procedures to be followed throughout the development of the standards for various classifications and end-products made of vinyl film.

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Wilner Wood Products Co ... 76
Witco Chemical Company ... 75
Wood, Alan, Steel Co. ... 65
Wyandotte Chemicals Corp. ... 38

Zink & Triest Co. ... 60
Zinsser & Co., Inc. ... 79

Mobay Appoints Christman Chief Chemist at New Plant

Robert A. Christman has been appointed chief chemist for Mobay Chemical Company's new plant now being constructed at New Martinsville, W. Va. Mr. Christman, who had been an analytical chemist at Monsanto Chemical Company's William G. Krummrich plant at Monsanto, Ill., has taken up his new duties with the Mobay research group at Anniston, Ala., until the plant is completed later this year.

Mr. Christman will be in charge of the control and analytical laboratories at the New Martinsville plant. He joined Monsanto in 1947 as an assistant analytical chemist at the Krummrich plant and was appointed an assistant laboratory supervisor in 1949. In 1952 he was appointed laboratory supervisor and in January, 1955, was assigned to the development section of the analytical laboratory at that plant.

Bids Wanted

Ethyl alcohol, USP, for fiscal year 1956, inv. 5123-A S2, May 20, Panama Canal Co., Procurement Officer, Procurement Div., 21 West St., N. Y. 6, N. Y.

Menthol, 240 lbs., crystals, USP, inv. Z 33048, May 23, Panama Canal Co., Procurement Officer, Procurement Div., 21 West St., N. Y. 6, N. Y.

Nitrogen, 6,000 liters liquid, inv. 61, May 31, Rocky Mountain Arsenal, Purchasing & Contracting Office, Denver, Colo.

Paint, enamel for period of 6 months from July 1, 1955; Newark, inv. NY-3D-61286, May 20, Gen. Services Adm., Region 2, Business Service Center, 250 Hudson St., N. Y. 13, N. Y.; 1,300 gals. thinner, inv. 3G-61108, May 20, 1,800 gals. enamel, inv. 3G-60714, May 20, Gen. Services Adm., Business Service Center, 7th & D Sts., S.W., Washington 25, D. C.

Rock salt, gran., for period from July 1, 1955, thru June 30, 1956, inv. 12, May 18, Vets. Adm. Hospital, Memorial Station, Honor Heights Drive, Muskogee, Okla.

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STEEL BALL MILLS: Hoffman, Ind. Vacuum Still Mod. A50 near new; (3) J. H. Day 3-roll Mills 31x12" Holow Rolls. Kent 3-roll Lab Mill; (2) Premier Mills Type U3; Patterson Jacketed 6'x5' 400 gal. Berylite Mill; (2) Patterson Jacketed 4'x5' Steel Ball Mills; 350 gal. Charge Cap; Abbey 6x6 Steel Ball Mill; Patterson 36x36 and 36x30 Steel Ball Mills.

PEBBLE MILLS: (18) Abbey 34x30, 36x22, 36x42, 60x48 and 54x38 25 to 85 gal. charge and Patterson 400 gal. charge.

PADDLE MIXERS: (10) Dayfrom 100 to 500 gal. cap. General 500 gal. Ribbon Belt Type; 2 Bonner 100 gal. cap. etc.

MISC. MIXERS: 3 Premier 50 gal. Premixers; 7 Ross Post Mixers; 5 H. Gray Co. Post mixers and many others.

TANKS: (Glascote, welded and Riveted); (3) 1500 Ga. Dish Bottom w/ agitators; 500 gal. Pfaundler, glass lined; (3) 550 gal. w/circulating pumps, dish bottom. (8) other dish bottom tanks w/agitators from 550 to 1050 gal.

STEEL TANKS w/agitators: (10) Ind. Process Eng. Co. 1286 Ga. 72" diam. Flat bottom w/motor driven agitators; (4) Pfaugler flat bottom 220 to 1300 gallon; (7) 14,316 Ga. Cyl. Tanks, Riveted & Welded; (4) 11,287 gal. Cyl. Riveted Tanks; (5) 10,640 gal. Cyl. Riveted Tanks and many others.

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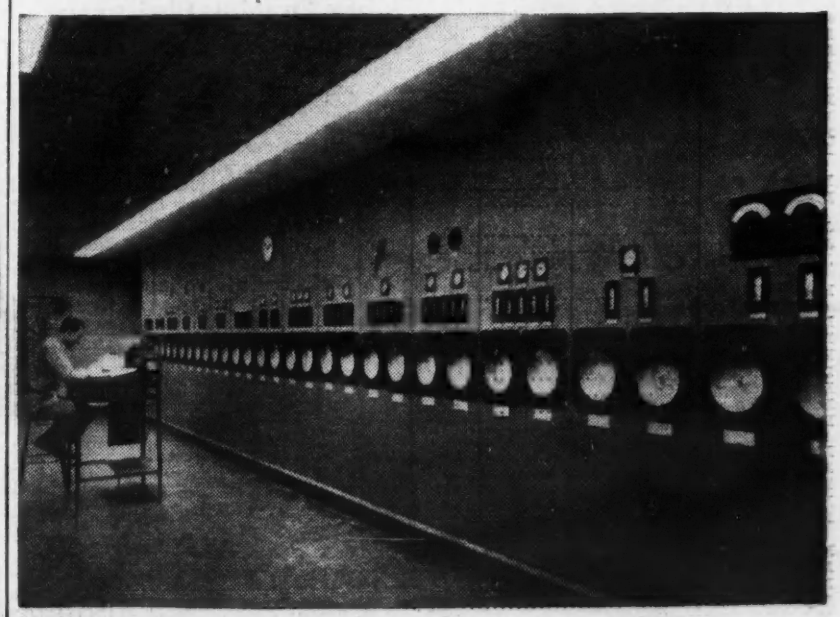

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